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Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number	90/007,093
		Filing Date	06/18/2004
		First Named Inventor	6085192
		Art Unit	2163
		Examiner Name	Alford W. Kindred
Sheet	15	of	16
		Attorney Docket Number	25587-033-005 RE

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city	T²
PKL	A15	Hong, Jack et al., "Personal Electronic Notebook with Sharing," Proceedings of the Fourth Workshop on Enabling Technologies: Infrastructure for Collaborative Enterprises, Berkeley Springs, West Virginia, April 20-22, 1995, pp. 88-94	
	B15	Mace, Scott, "DataSync 2.0 enhances synchronization of data," InfoWorld, June 6, 1994, p. 28	
	C15	Mace, Scott, "Database replication products debut," InfoWorld, November 15, 1993, p. 19	
	D15	Gryphon, Robert, "DataSync line matches up," InfoWorld, May 23, 1994, p. 161	
	E15	Patterson, John F. et al., "Notification Servers for Synchronous Groupware," Proceedings, ACM 1996 Conference on Computer Supported Cooperative Work, Boston, Massachusetts, November 16-20, 1996, pp. 122-129	
	F15	Zhao, Jian and Hoppe, H. Ulrich, "Supporting Flexible Communication in Heterogeneous Multi-User Environments," 1994 IEEE, pp. 442-449	
	G15	Gong, Li, "Enclaves: Enabling Secure Collaboration Over the Internet," IEEE Journal on Selected Areas in Communications, Vol. 15, No. 3, April 1997, pp. 567-575	
	H15	Bruno, Lee, "Directory Services Tie It All Together," Data Communications, March 1997, pp. 75-83	
	J15	Guy, Richard G. et al., "Implementation of the Ficus Replicated File System," Proceedings of the Summer 1990 USENIX Conference, Anaheim, California, June 11-15, 1990, pp. 63-70	
	K15	Page, Thomas W. Jr. et al., "Management of Replicated Volume Location Data in the Ficus Replicated Data System," Conference Proceedings, USENIX Summer 1991 Technical Conference, Nashville, Tennessee, June 10-14, 1991, pp. 17-29	
	L15	Reiher, Peter et al., "Resolving File Conflicts in the Ficus File System," Conference Proceedings, USENIX Summer 1994 Technical Conference, Boston, Massachusetts, June 6-10, 1994, pp. 183-195	
	M15	Walker, Bruce et al., "The LOCUS Distributed Operating System," Proceedings of the Ninth ACM Symposium on Operating Systems Principles, Bretton Woods, New Hampshire, October 10-13, 1983, pp. 49-70	
SLW	N15	Parker, D. Stott Jr. et al., "Detection of Mutual Inconsistency in Distributed Systems," IEEE Transactions on Software Engineering, Vol. SE-9, No. 3, May 1983, pp. 240-246	

Examiner Signature	<i>Alford W. Kindred</i>	Date Considered	5/23/05
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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	90/007,093
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Attorney Docket Number	25587-033-005 RE

Sheet

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of

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city	T ²
<i>Am</i>	A16	Ceri, Stefano et al., "The Case for Independent Updates," Second Workshop on the Management of Replicated Data, Monterey, California, November 12-13, 1992, pp. 17-19	
<i>I</i>	B16	Downing, Alan R. et al., "OSCAR: A System for Weak-Consistency Replication," Proceedings, Workshop on the Management of Replicated Data, Houston, Texas, November 8-9, 1990, pp. 26-30	
<i>I</i>	C16	Siegel, Alex et al., "Deceit: A Flexible Distributed File System," Proceedings of the Summer 1990 USENIX Conference, Anaheim, California, June 11-15, 1990, pp. 51-61	
<i>I</i>	D16	Chutani, Satesh, "The Episode File System," Conference Proceedings, USENIX Winter 1992 Technical Conference, San Francisco, California, January 20-24, 1992, pp. 43-59	
<i>I</i>	E16	Seltzer, Margo, "An Implementation of a Log-Structured File System for UNIX," Conference Proceedings, USENIX Winter 1993 Technical Conference, San Diego, California, January 25-29, 1993, pp. 307-326	
<i>Am</i>	F16	Vahalia, Uresh, "Metadata Logging in an NFS Server," Conference Proceedings, USENIX 1995 Technical Conference on UNIX and Advanced Computing Systems, New Orleans, Louisiana, January 16-20, 1995, pp. 265-276	

Examiner Signature <i>Alford W. Kindred</i>	Date Considered <i>5/24/05</i>
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Notice of References Cited	Application/Control No. 90/007,093	Applicant(s)/Patent Under Reexamination 6085192	
	Examiner Alford W. Kindred	Art Unit 2163	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
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FOREIGN PATENT DOCUMENTS

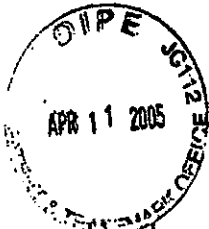
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	N					
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	Q					
	R					
	S					
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)			
	U	Rao, Venka & Aline, Mary, "Burrowing through firewalls," December 1996, pp 1-5			
	V				
	W				
	X				

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
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Re-Exam



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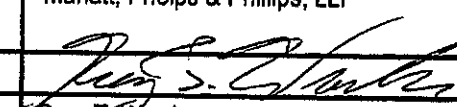
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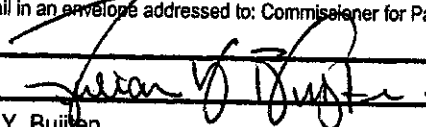
TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	90/007,093
	Filing Date	06/18/2004
	First Named Inventor	Daniel J. Mendez
	Art Unit	2172
	Examiner Name	Alford W. Kindred
Total Number of Pages in This Submission	Attorney Docket Number	25587-033-005 RE

ENCLOSURES (Check all that apply)		
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Firm Name	Manatt, Phelps & Phillips, LLP		
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PATENT

Serial No. 09/897,003

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re reexamination of: 6,085,192

First Named Inventor: Daniel J. Mendez

Control No.: 90/007,093

Filed: 06/18/2004

**For: SYSTEM AND METHOD FOR
SECURELY SYNCHRONIZING
MULTIPLE COPIES OF A
WORKSPACE ELEMENT IN A
NETWORK**

Confirmation No.: 9956

Examiner: Alford W. Kindred

Group Art Unit: 2163

Attorney Docket No.: 25587-033-005 RE

AMENDMENT AND RESPONSE IN EX PARTE REEXAMINATION

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The following amendments and remarks are filed in response to the Office Action mailed February 7, 2005, the shortened three-month statutory period for response to which expires on May 7, 2005.

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 5 of this paper.

Remarks/Arguments begin on page 10 of this paper.

IN THE SPECIFICATION

Please replace the paragraph at Column 4, ll. 20-38 with the following amended paragraph:

An operating system 240 includes a program for controlling processing by the CPU 205, and is typically stored in the data storage device 230 and loaded into the RAM 235 for execution. A service engine 245 includes a program for performing a particular service such as maintaining an e-mail data base, a calendar data base, a bookmarks data base or another file data base, and may be also stored in the data storage device 230 and loaded into the RAM 235 for execution. To perform a service, the service engine 245 operates on service data 250 (e.g., the e-mail data 165, the file data 170, the calendar data 175 or the user data 180), which is typically stored in the data storage device [250] 230. The service data 250 includes version information 255 indicating the date and time of the last modification. The service engine 245 operates to update the version information 255 whenever modifications are made. It will be appreciated that the portion of memory in the data storage device [250] 230 which contains the service data 250 is referred to as the service "store."

Please replace the paragraph at Column 4, ll. 44-59 with the following amended paragraph:

An operating system 340 includes a program for controlling processing by the CPU 305, and is typically stored in the data storage device 330 and loaded into the RAM 335 for execution. A desktop service engine 345 (i.e., a particular service engine 245, FIG. 2) includes a service program for managing user data 180 (i.e., particular service data 250, FIG. 2) which includes version information 350 (i.e., particular version information 255, FIG. 2). The desktop service engine 345 may be also stored in the data storage device 330 and loaded into the RAM 335 for execution. The user data 180 may be stored in the data storage device 330. As stated above with reference to FIG. 1, the base system [1 90] 190 operates to synchronize the workspace data 185 (which includes user data 180) with the workspace data 123. The base system 190 may be also stored in the data storage device 330 and loaded into the RAM 335 for execution.

Please replace the paragraph at Column 5, ll. 35-49 with the following amended paragraph:

The synchronization-start module 420 includes routines for determining when to initiate synchronization of workspace data 123 and workspace data 185. For example, the synchronization-start module 420 may initiate data synchronization upon user request, at a particular time of day, after a predetermined time period passes, after a predetermined number of changes, after a user action such as user log-off or upon like criteria. The synchronization-start module 420 initiates data synchronization by instructing the general synchronization module 425 to begin execution of its routines. It will be appreciated that communications with synchronization agent 126 preferably initiate from within the corporate LAN [1135] 135, because the typical corporate firewall 130 prevents in-bound communications and allows out-bound communications.

Please replace the paragraph at Column 6, ll. 15-27 with the following amended paragraph:

The content-based synchronization module 430 includes routines for reconciling two or more modified versions in workspace data 123, 185 of the same workspace element. For example, if the original and the copy of a user workspace element have both been modified independently since the last synchronization, the [contentbased] content-based synchronization module 430 determines the appropriate responsive action. The content-based synchronization module 430 may request a user to select the preferred one of the modified versions or may respond based on preset preferences, i.e., by storing both versions in both stores or by integrating the changes into a single preferred version which replaces each modified version at both stores.

Please replace the paragraph at Column 6, ll. 28-41 with the following amended paragraph:

FIG. 5 is a block diagram illustrating details of the synchronization agent 126, which includes a communications module 505 (similar to the communications module 405 described above with reference to FIG. 4) and a general synchronization module 510 (similar to the general synchronization module 425 described above also with reference to FIG. 4). The communications

module 505 includes routines for compressing data, and routines for communicating via the communications channel 125 with the base system 190. The communications module 505 may further include routines for establishing a secure communications channel through the global firewall [126] 115 and through the corporate firewall 130.

Please replace the paragraph at Column 6, ll. 42-56 with the following amended paragraph:

The general synchronization module 510 includes routines for comparing the version information 124 with the last synchronization signature 435, and routines for forwarding to the general synchronization module 425 version information 124 determined to be modified. The general synchronization module 510 may [either] maintain its own last synchronization signature 435 copy (not shown). Alternatively, the request to synchronize from the base system 190 may include a copy of the last synchronization signature 435. The general synchronization module 510 further includes routines for receiving preferred versions of workspace data 185 workspace elements from the general synchronization module 425, and routines for forwarding preferred versions of workspace data 123 workspace elements to the general synchronization module 425.

IN THE CLAIMS:

Claim 24 has been amended herein. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended.

Listing of Claims:

1. (Original) A computer-based method comprising the steps of:
 - (a) generating first examination results from first version information which indicates whether a first workspace element stored at a first store within a firewall has been modified;
 - (b) generating second examination results from second version information which indicates whether an independently-modifiable copy of the first workspace element has been modified, the copy being stored at a second store outside the firewall;

- (c) initiating steps (a) and (b) from within the firewall when predetermined criteria have been satisfied;
- (d) generating a preferred version from the first workspace element and from the copy based on the first and second examination results; and
- (e) storing the preferred version at the first store and at the second store.

2. (Original) The method of claim 1 wherein the second store is on a global server outside the firewall and which is protected by a global firewall.

3. (Original) The method of claim 1 wherein the first version information includes the date and time the first workspace element was last modified and the second version information includes the date and time the copy was last modified.

4. (Original) The method of claim 3 wherein generating the first examination results includes the step of comparing the first version information against a date and time of last synchronization.

5. (Original) The method of claim 3 wherein generating the second examination results includes the step of comparing the second version information against a date and time of last synchronization.

6. (Original) The method of claim 1 further comprising, before generating the first examination results, the step of updating the first version information whenever the first workspace element is modified.

7. (Original) The method of claim 1 further comprising, before generating the second examination results, the step of updating the second version information whenever the copy is modified.

8. (Original) The method of claim 1 wherein if only one of the first workspace element and the copy has been modified, then the step of generating includes selecting the one as the preferred version.

9. (Original) The method of claim 1 further comprising the step of locating the first workspace element, the first version information, the copy and the second version information.

10. (Original) A system comprising:
a general synchronization module for operating within a first firewall and for examining first version information to determine whether a first workspace element has been modified;
a synchronization agent for operating outside the first firewall and for forwarding to the general synchronization module second version information which indicates whether an independently modifiable copy of the first workspace element has been modified;
a synchronization-start module for operating within the first firewall and for initiating the general synchronization module and the synchronization agent when predetermined criteria have been satisfied;
means for generating a preferred version from the first workspace element and from the copy by comparing the first version information and the second version information; and
means for storing the preferred version at the first store and at the second store.

11. (Original) The system of claim 10 further comprising a communications module for communicating through the first firewall.

12. (Original) The system of claim 10 wherein the synchronization agent and the second store are on a global server which is protected by a global firewall.

13. (Original) The system of claim 12 further comprising a communications module for communicating through the first firewall and through the global firewall.

14. (Original) The system of claim 10 wherein the first version information includes the date and time the first workspace element was last modified and the second version information includes the date and time the copy was last modified.

15. (Original) The system of claim 14 wherein the general synchronization module compares the first version information against a date and time of last synchronization.

16. (Original) The system of claim 14 wherein the synchronization agent compares the second version information against the date and time of last synchronization.

17. (Original) The system of claim 10 further comprising means for updating the first version information whenever the first workspace element is modified.

18. (Original) The system of claim 10 further comprising means for updating the second version information whenever the copy is modified.

19. (Original) The system of claim 10 wherein if only one of the first workspace element and the copy has been modified, then the means for generating selects the one as the preferred version.

20. (Original) The system of claim 10 further comprising a locator module for locating the first store, the first workspace element, the first version information, the second store, the copy and the second version information.

21. (Original) A system comprising:

first means for generating first examination results from first version information which indicates whether a first workspace element stored at a first store within a firewall has been modified;

second means for generating second examination results from second version information which indicates whether an independently-modifiable copy of the first workspace element has been modified, the copy being stored at a second store outside the firewall;

means for initiating the first and second means from within the firewall when predetermined criteria have been satisfied;

means for generating a preferred version from the first workspace element and from the copy based on the first and second examination results; and

means for storing the preferred version at the first store and at the second store.

22. (Original) A computer-readable storage medium storing program code for causing a computer to perform the steps of:

- (a) generating first examination results from first version information which indicates whether a first workspace element stored at a first store within a firewall has been modified;
- (b) generating second examination results from second version information which indicates whether an independently-modifiable copy of the first workspace element has been modified, the copy being stored at a second store outside the firewall;
- (c) initiating steps (a) and (b) from within the firewall when predetermined criteria have been satisfied;
- (d) generating a preferred version from the first workspace element and from the copy based on the first and second examination results; and
- (e) storing the preferred version at the first store and at the second store.

23. (Original) A computer-based method comprising the steps of:

- (a) generating first examination results from first version information which indicates whether a first workspace element stored at a first store within a firewall has been modified;
- (b) generating second examination results from second version information which indicates whether an independently-modifiable copy of the first workspace element has been modified, the copy being stored at a second store outside the firewall;
- (c) initiating steps (a) and (b) from within the firewall when predetermined criteria have been satisfied;
- (d) determining based on the first and second examination results that both the first workspace element and the copy have been modified; and
- (e) storing both the first workspace element and the copy at the first store and at the second store.

24. (Currently amended) A system comprising:

first means for generating first examination results from first version information which indicates whether a first workspace element stored at a first store within a firewall has been modified;

second means for generating second examination results from second version information which indicates whether an independently-modifiable copy of the first workspace element has been modified, the copy being stored at a second store outside the firewall;

means for initiating the first and second means from within the firewall when predetermined criteria have been satisfied;

means for determining based on the first and second examination results that both the first workspace element and the copy have been modified; and

means for storing both the first [file] workspace element and the copy at the first store and at the second store.

25. (Original) A system comprising:

a global server for operating outside a firewall and including memory for storing first workspace data and corresponding first version information; and

a synchronization agent for managing the first workspace data and the corresponding first version information and for communicating with remote clients; and

a remote client for operating within the firewall and including memory for storing second workspace data and corresponding second version information;

means for cooperating with the synchronization agent to synchronize the first workspace data with the second workspace data by examining the first version information and the second version information; and

a synchronization-start module for initiating workspace data synchronization between the global server and the remote client.

REMARKS

The Office Action mailed February 7, 2005, has been received and reviewed. Claims 1 through 25 are currently pending. Claims 1, 9 through 11, and 20 through 25 stand rejected. Claims 2 through 8 and 12 through 19 have been objected to as being dependent upon rejected base claims, but the indication of allowable subject matter in such claims is noted with appreciation.

The Patent Owner has amended claim 24, as well as portions of the specification, for the purpose of correcting minor typographical or grammatical errors. The amendments are supported by the as-filed specification and drawings and do not add any new matter. Furthermore, the amendments are not made for the purpose of narrowing the claims, and the Patent Owner respectfully asserts that no surrender or disclaimer of claim scope, and more specifically, of the broadest possible range of equivalents to which the Patent Owner may be entitled has been effectuated.

Allowable Subject Matter

Claims 2 through 8 and 12 through 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Patent Owner respectfully submits that the objection to claims 2 through 8 and 12 through 19 is improper, and that the claims are allowable without being rewritten in independent form.

Support for the allowability of claims 2 through 8 and 12 through 19 in their present form is found in MPEP 2660.1, which states:

If an unamended base patent claim (i.e., a claim appearing in the reexamination as it appears in the patent) has been rejected or cancelled, any claim which is directly or indirectly dependent thereon should be confirmed or allowed if the dependent claim is otherwise allowable. The dependent claim should *not* be objected to or rejected merely because it depends on a rejected or canceled patent claim. No requirement should be made for rewriting the dependent claim in independent form.

In view of the foregoing, the Patent Owner respectfully requests that the objection to claims 2 through 8 and 12 through 19 be withdrawn.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on U.S. Patent No. 5,857,201 to Wright, Jr. et al. in View of U.S. Patent No. 6,006,274 to Hawkins et al.

Claims 1, 9 through 11 and 20 through 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wright (U.S. Patent No. 5,857,201) in view of Hawkins (U.S. Patent No. Hawkins). The Patent Owner respectfully traverses this rejection, as hereinafter set forth.

M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

The present rejections of claims 1, 9 through 11 and 20 through 25 are improper because they fail to establish a *prima facie* case of obviousness.

Turning to the cited references, the Wright patent was filed on June 18, 1996, and is directed to a client/server architecture for connection between mobile computing devices and enterprise computing systems. The client/server system described includes a server portion 107 having servers and databases connected by a LAN 106, clients 136 such as PDA's, and a FormLogic (FL) server 132 acting as a gateway between the clients 136 and enterprise data sources on the LAN (Fig. 2 and cols. 4-6). Communication agents 170 on clients 136 are used to describe synchronization sessions 200, 202 which are requested by a client 136 for performing specific tasks 204-210 (e.g. get outgoing mail from client, send new incoming mail from server to client)(Fig. 3. and cols. 6-7). Upon client log-on, the server checks an application profile sent from the clients 136, and determines whether the client has the latest versions of application software. If not, the server "synchronizes" the applications by sending the latest application

versions to the client (col. 11). Thereafter, the server carries out the specific tasks for a given session.

The Hawkins patent was filed on January 30, 1997, and is directed to systems for synchronizing a PDA with a desktop computer. Synchronization environments are described as including: synchronizing multiple palmtop computer systems with a single personal computer system, synchronizing a single palmtop computer system with multiple personal computer systems, synchronizing a palmtop computer system with a remote personal computer system across a network using a local personal computer system, and remotely synchronizing with a personal computer system across a telephone line (col. 2). Synchronization involves connecting a PDA to a desktop computer, and then initiating synchronization from the PDA (Figs. 1, 2, 4, 5a, and 6a-7). In one synchronization example provided, the PDA communicates with a desktop computer located in a LAN over the Internet (col. 10). The LAN may be protected by a firewall, which may require any communication with the Internet to pass through a proxy application. Each proxy application filters the packets associated with its respective protocol before allowing the packets to access the internal Local area Network.

Initially, claims 1, 9 through 11 and 20 through 25 all include limitations recited in terms of a "firewall." Claims 1, 22 and 23, for example, recite the limitation of "initiating steps (a) and (b) from within the firewall." Claim 10 recites the limitation of "a synchronization-start module for operating within the first firewall and for initiating the general synchronization module and the synchronization agent," and claims 21 and 24 recite "means for initiating the first and second means from within the firewall." Claim 25 recites "a global server for operating outside a firewall" and "a remote client for operating within the firewall."

The Office asserts that Wright's enterprise computer environment clearly included a firewall element for security reasons (Office Action, p. 3). After a careful review of this reference, however, the Patent Owner is unable to find any discussion of a firewall whatsoever, and it is respectfully submitted that this is a mischaracterization of what Wright discloses.

With respect to claims 1, 9-11, and 20-24, the Office goes on to acknowledge that Wright does not explicitly teach a firewall element in a manner illustrated in the claim language, but asserts that Hawkins teaches initiating synchronization from within a firewall and it would be obvious to modify Wright in this manner to provide an added security measure (Office Action, p. 3). As discussed above, however, the disclosure in Hawkins relied upon by the Office merely

describes using proxy applications on a firewall server to carry out a specific synchronization protocol (col. 10, ll. 43-58). In every instance, Hawkins describes synchronization as being initiated by a remote device, rather than within a firewall (Figs. 2 and 5a, and col. 3, ll. 22-27 and 65-67, col. 4, ll. 38-42, col. 5, ll. 59-65, col. 6, ll. 39-40, and col. 9, ll. 32-49). As such, neither Wright nor Hawkins teach or suggest initiating synchronization from within a firewall, and there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or combine reference teachings as presented by the Office.

With respect to claim 25, which recites "a global server for operating outside a firewall," Hawkins only teaches using a firewall to protect an internal LAN (Fig. 7). Even if there were some motivation to modify Wright to include a firewall as taught by Hawkins, it would not suggest whether the FL server 132 of Wright (which the Office considers to be a global server) would be inside or outside the firewall. Moreover, it appears that there are only two possible combinations of Wright and Hawkins that could be used in conjunction with the present rejection, neither of which would work. If the FL server 132 was modified to also act as a firewall server such as that described in Hawkins, it would not be outside the firewall. If a firewall server was inserted in between the FL server 132 and the rest of the network, FL server 132 would not perform the intended function described in Wright of serving as a gateway between remote clients and network servers.

In view of the foregoing, the proposed combination of references fails to establish a *prima facie* case of obviousness, and the rejected claims are allowable at least for the reasons discussed above. The claims are further allowable because Wright and Hawkins also fail to teach or suggest other limitations of claims 1, 9 through 11 and 20 through 25.

Independent claims 1 and 21-24, for example, further recite the limitations of "first version information which indicates whether a first workspace element ... has been modified" and "second version information which indicates whether an independently modifiable copy of the first workspace element has been modified." Independent claim 10 further recites the limitations of "examining first version information to determine whether a first workspace element has been modified" and "second version information which indicates whether an independently modifiable copy of the first workspace element has been modified."

The Office relies on a discussion of synchronizing application programs in Wright to satisfy these limitations. What Wright actually describes, however, is a situation wherein a remote client device 136 establishes a communication link with the FL server 132 and sends log-on information (col. 10, l. 55 – col. 11, l. 7). Part of the information sent is an application profile, which includes application version numbers. The server compares the version numbers against an administration profile containing a list of the most current applications and their version numbers (col. 11, ll. 10-17). If any applications on the remote client are not the most current, a synchronization program sends the new “most current” application(s) to the client.

This operation does not indicate or determine whether a workspace element or copy has been modified, as recited in independent claims 1, 10 and 21-24. Rather, it is a one-way operation wherein the server simply looks to see if it has a new version of application software that is not on the client. If so, it just sends the new application to the client. Moreover, the Wright patent does not teach that applications on the handheld device are independently modifiable, nor does it teach that e-mails on the handheld device are independently modifiable. Wright, therefore, fails to disclose the above described limitations of independent claims 1, 10, and 21-24, either alone or as proposed to be combined with Hawkins.

Independent claims 23 and 24 also further recite “storing both the first workspace element and the copy at the first store and the second store.” The Office relies on the discussion of checking for new applications, as well as the discussion of transferring e-mail records from the client to the Server in Wright to assert this limitation (Office Action, p. 5). Wright does describe storing the same version of an application or an e-mail record at both the client and the server (col. 11:10-24 and 30-50). Multiple versions of applications or email records, however, are not disclosed as being stored on either the remote client 136 or the FL server 132.

In view of the foregoing, the Patent Owner respectfully submits that there is no motivation for combining the cited references as suggested, and that neither of the references, alone or as combined, teach or suggest all of the limitations of the rejected claims. Accordingly, the Patent Owner submits that claims 1, 9 through 11 and 20 through 25 are allowable over Wright in view of Hawkins, and respectfully requests that the present rejections be withdrawn and the case passed to issue.

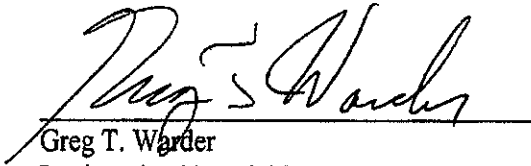
ENTRY OF AMENDMENTS

The proposed amendments to the specification and claim 24 above should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter to the application.

CONCLUSION

Claims 1 through 25 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact the Patent Owner's undersigned attorney.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Greg T. Warder", is written over a horizontal line.

Greg T. Warder
Registration No. 50,208
Attorney for Patent Owner(s)

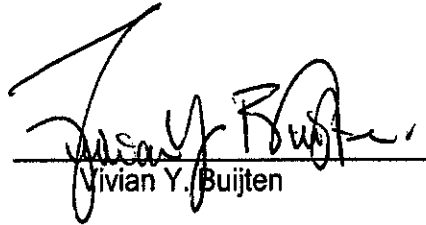
MANATT, PHELPS & PHILLIPS LLP
1001 Page Mill Rd, Bldg 2
Palo Alto, California 94304
650-812-1321 Telephone
650-213-0260 Facsimile

Date: April 7, 2005

20131332.1

PROOF OF SERVICE

I hereby certify that a copy of the foregoing Amendment and Response in Ex Parte Reexamination, has been served upon the requester at the address listed below, by U.S. Mail, on April 7, 2005.



Vivian Y. Buijten

Khaled Shami, Esq.
Thelen Reid & Priest LLP
225 West Santa Clara Street, 12th Floor
San Jose, CA 95113-1723

MAR 10 2005

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	90/007,093
Filing Date	06/18/2004
First Named Inventor	Daniel J. Mendez
Art Unit	2172
Examiner Name	Alford W. Kindred
Attorney Docket Number	25587-033-005 RE

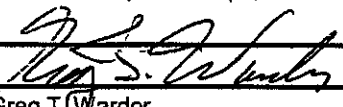
ENCLOSURES (Check all that apply)

- | | | |
|---|--|--|
| <input type="checkbox"/> Fee Transmittal Form
<input type="checkbox"/> Fee Attached
<input type="checkbox"/> Amendment/Reply
<input type="checkbox"/> After Final
<input type="checkbox"/> Affidavits/declaration(s)
<input type="checkbox"/> Extension of Time Request
<input type="checkbox"/> Express Abandonment Request
<input type="checkbox"/> Information Disclosure Statement
<input type="checkbox"/> Certified Copy of Priority Document(s)
<input type="checkbox"/> Response to Missing Parts/Incomplete Application
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)
<input type="checkbox"/> Licensing-related Papers
<input type="checkbox"/> Petition
<input type="checkbox"/> Petition to Convert to a Provisional Application
<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address
<input type="checkbox"/> Terminal Disclaimer
<input type="checkbox"/> Request for Refund
<input type="checkbox"/> CD, Number of CD(s) _____
<input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Status Letter
<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
See Remarks Below |
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Remarks

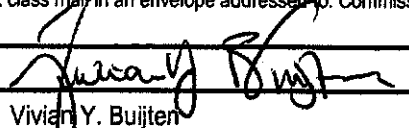
Return Receipt Postcard; Certificate of 1st Class Mailing; Supplemental Information Under 37 CFR 1.565(a); Court Docket Sheet; Proof of Service

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Manatt, Phelps & Phillips, LLP		
Signature			
Printed name	Greg T. Warder		
Date	3/7/05	Reg. No.	50,208

CERTIFICATE OF TRANSMISSION/MAILING

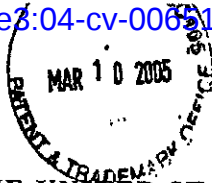
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Signature			
Typed or printed name	Vivian Y. Buijten	Date	03/07/2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventors:	Mendez <i>et al.</i>	Examiner:	Alford W. Kindred
Control. No.:	90/007,093	Art Unit:	2172
Filing Date:	06/18/2004	Confirmation No.	9956
Reexamination of:	6,085,192		
Atty. Docket No.:	25587-033-005 RE		
Title:	System and method for securely synchronizing multiple copies of a workspace element in a network		

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION**UNDER 37 C.F.R. § 1.565(a)**

A request for reexamination of U.S. Patent No. 6,085,192 received a filing date of June 18, 2004 and was granted on August 6, 2004. The patent owner, Visto Corporation, submits the following information under 37 C.F.R. § 1.565(a), which supplements the prior information under 37 C.F.R. § 1.565(a), filed October 6, 2004.

The following recently filed proceeding involves U.S. Patent No. 6,085,192 and the results of such proceedings:

- Visto Corporation v. Smartner Information Systems, LTD, No. 2-05-CV-91
(E.D. Tex. filed February 25, 2005). Pending

Attached for the Examiner's convenience, is a listing of the docket items filed, to date, in connection with the above proceeding. Please do not hesitate to contact the patent owner's attorney listed below.

Respectfully submitted,

Date

3/7/05



Greg T. Warder

Registration No. 50,208

MANATT, PHELPS & PHILLIPS LLP

1001 Page Mill Road, Building 2

Palo Alto, California 94304

650-812-1321 Telephone

650-213-0286 Facsimile

20129765.1

**U.S. District Court [LIVE]
 Eastern District of TEXAS LIVE (Marshall)
 CIVIL DOCKET FOR CASE #: 2:05-cv-00091-TJW**

Visto Corporation v. Smartner Information Systems, LTD
 Assigned to: Judge T. John Ward
 Cause: 35:271 Patent Infringement

Date Filed: 02/25/2005
 Jury Demand: Plaintiff
 Nature of Suit: 830 Patent
 Jurisdiction: Federal Question

Plaintiff**Visto Corporation**

represented by **Samuel Franklin Baxter**
 Attorney at Law
 P O Box O
 Marshall, TX 75671
 903/927-2111
 Fax: 19039272622
 Email: sbaxter@mckoolsmith.com
LEAD ATTORNEY
ATTORNEY TO BE NOTICED

V.

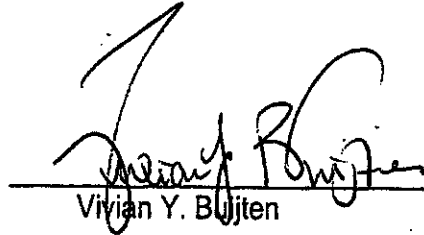
Defendant**Smartner Information Systems, LTD**

Date Filed	#	Docket Text
02/25/2005	<u>1</u>	COMPLAINT with JURY DEMAND against Smartner Information Systems, LTD (Filing fee \$ 250.) , filed by Visto Corporation. (Attachments: # <u>1</u> Exhibit A# <u>2</u> Exhibit B# <u>3</u> Exhibit Fig 3# <u>4</u> Exhibit D# <u>5</u> Exhibit E# <u>6</u> Civil Cover Sheet)(poa,) (Entered: 02/28/2005)
03/01/2005		Filing fee: \$ 250.00, receipt number 2-1-50 (ch,) (Entered: 03/03/2005)

PACER Service Center			
Transaction Receipt			
03/07/2005 15:12:52			
PACER Login:	mp1249	Client Code:	25587-054
Description:	Docket Report	Search Criteria:	2:05-cv-00091-TJW
Billable Pages:	1	Cost:	0.08

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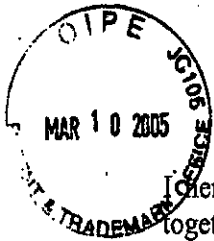
I hereby certify that a copy of the foregoing Supplemental Information Under 37
C.F.R. §1.565(a), has been served upon the requester at the address listed below, by
U.S. Mail, on March 7, 2005.



Vivian Y. Buijten

Khaled Shami, Esq.
Thelen Reid & Priest LLP
225 West Santa Clara Street, 12th Floor
San Jose, CA 95113-1723

Receipt



CERTIFICATE OF FIRST CLASS MAILING
(37 C.F.R. 1.8)

I hereby certify that the attached Supplemental Information Under 37 C.F.R. 1.565(a) form, together with the attached Court Docket Sheet, Transmittal form, Proof of Service and return receipt postcard, are being deposited with the United States Postal Service as First Class Mail, in an envelope with sufficient postage, and addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

March 7, 2005

Date of Deposit

Vivian Y. Buijten

Typed Name of Person Mailing Correspondence

Signature

Date

3/7/2005



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/007,093	06/18/2004	6085192	035754-007	9956

7590 02/07/2005

Jinntung Su
 Manatt, Phelps & Phillips LLP
 1001 Page Mill Road
 Building 2
 Palo Alto, CA 94304

EXAMINER

ART UNIT PAPER NUMBER

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

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(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

Robert E. Krebs
P.O. Box 640640
San Jose, CA 95164

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. 90/007,093.

PATENT NO. 6085192.

ART UNIT 2163.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

Office Action in Ex Parte Reexamination	Control No. 90/007,093	Patent Under Reexamination 6085192	
	Examiner Alford W. Kindred	Art Unit 2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

- a ☒ Responsive to the communication(s) filed on 18 June 2004. b ☒ This action is made FINAL.
c ☒ A statement under 37 CFR 1.530 has not been received from the patent owner.

A shortened statutory period for response to this action is set to expire 3 month(s) from the mailing date of this letter. Failure to respond within the period for response will result in termination of the proceeding and issuance of an *ex parte* reexamination certificate in accordance with this action. 37 CFR 1.550(d). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).** If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 3. <input type="checkbox"/> Interview Summary, PTO-474. |
| 2. <input type="checkbox"/> Information Disclosure Statement, PTO-1449. | 4. <input type="checkbox"/> _____. |

Part II SUMMARY OF ACTION

- 1a. ☒ Claims 1-25 are subject to reexamination.
- 1b. ☐ Claims _____ are not subject to reexamination.
2. ☐ Claims _____ have been canceled in the present reexamination proceeding.
3. ☐ Claims _____ are patentable and/or confirmed.
4. ☒ Claims 1, 9-11, and 20-25 are rejected.
5. ☒ Claims 2-8 and 12-19 are objected to.
6. ☐ The drawings, filed on _____ are acceptable.
7. ☐ The proposed drawing correction, filed on _____ has been (7a) ☐ approved (7b) ☐ disapproved.
8. ☐ Acknowledgment is made of the priority claim under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the certified copies have
 - 1 ☐ been received.
 - 2 ☐ not been received.
 - 3 ☐ been filed in Application No. _____.
 - 4 ☐ been filed in reexamination Control No. _____.
 - 5 ☐ been received by the International Bureau in PCT application No. _____.
- * See the attached detailed Office action for a list of the certified copies not received.
9. ☐ Since the proceeding appears to be in condition for issuance of an *ex parte* reexamination certificate except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte* Quayle, 1935 C.D. 11, 453 O.G. 213.
10. ☐ Other: _____

cc: Requester (if third party requester)

Application/Control Number: 90/007,093

Page 2

Art Unit: 2163

Detailed Action

1. This action is responsive to communications: Re-exam filed on 06/18/04.

Pending claims are 1-25.

Allowable Subject Matter

2. Claims 2-8 and 12-19, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

3. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach and/or suggest "generating first examination results from first version . . . generating second examination results from second version information . . . generating a preferred version from the first work-space element and from the copy based on the first and second examination results . . .", combined with "comparing the first version information against a date and time of last synchronization."

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Application/Control Number: 90/007,093

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Art Unit: 2163

5. Claims 1, 9-11 and 20-25 are rejected under as being unpatentable over Wright, US 5,857,201, in view of Hawkins, US# 6,006,274.

As per claims 1, Wright teaches "generating first examination results from first version information which indicates whether a first workspace element stored" (see col. 11, lines 2-30, whereas Wright's determinations of versions is equivalent to applicant's claims language of "results from version information . . .") "generating second examination results from second version information which indicates whether an independently-modifiable copy of the first workspace element has been modified, the copy being stored" (see col. 11, lines 2-26, whereas Wright's teachings of the checking of profiles combined with client applications versioning element teaches applicant's claim language above) "generating a preferred version from the first workspace element and from the copy based on the first and second examination results" (see col. 11, lines 35) "storing the preferred version at the first store and at the second store" (see col. 11, lines 6-33). **Wright** does not explicitly teach "initiating steps (a) and (b) from within the firewall when predetermined criteria have been satisfied" – Wright's enterprise computer environment clearly included a firewall element for security reasons, but does not explicitly teach a firewall element in a manner illustrated in applicant's claim language. Hawkins teaches "initiating steps (a) and (b) from within the firewall when predetermined criteria have been satisfied" (see col. 10, lines 44-63, whereas Hawkins firewall element teach applicant's claim language involving the use various firewalls for security reasons and based on a criteria . . . therefore the teachings are synonymous). It would have been obvious at the time of the invention for one ordinary skill in the art to

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have combined the teachings of Wright and Hawkins, because using the steps of "initiating steps (a) and (b) from within the firewall when predetermined criteria have been satisfied" would have given those skilled in the art tools to provide an added security measure, via a firewall, to network. This gives users the advantage of protecting the integrity of data in a network environment more efficiently.

As per claim 9, this claim is rejected on grounds corresponding to the arguments given above for rejected claim 1 and is similarly rejected.

As per claims 10-11, these claims are rejected on grounds corresponding to the arguments given above for rejected claim and are similarly rejected including the following:

--Wright teaches "a general synchronization module . . . for examining first version information to determine whether a first workspace element has been modified" (see col. 11, lines 6-34) "a synchronization agent for operating outside the first firewall and for forwarding to the general synchronization module second version information which indicates whether an independently modifiable copy of first workspace element has been modified" (see col. 5, lines 30-59 and col. 11, lines 6-67) "a synchronization -- start module . . . agent when predetermined criteria have been satisfied" (see col. 5, lines 46-64 and col. 11, lines 1-28).

As per claim 20, this claim is rejected on grounds corresponding to the arguments given above for rejected claim 1 and is similarly rejected.

As per claims 21-22, these claims are rejected on grounds corresponding to the arguments given above for rejected claim 1 and is similarly rejected.

Application/Control Number: 90/007,093

Page 5

Art Unit: 2163

As per claims 23-24, these claims are rejected on grounds corresponding to the arguments given above for rejected claim 1 and are similarly rejected including the following:

--Wright teaches storing both the first workspace element and the copy at the first store and at the second store" (see col. 11, lines 10-24 and 30-50).

As per claim 25, this claim is rejected on grounds corresponding to the arguments given above for rejected claim 1 and is similarly rejected including the following:

--Wright teaches "a global server . ." (see col. 6, lines 23-44) "memory for storing second workspace data . . ." (see col. 11, lines 2-34).

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Art Unit: 2163

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alford W. Kindred whose telephone number is 571-272-4037. The examiner can normally be reached on Mon-Fri 9:00 am- 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (571) 272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alford W. Kindred
Patent Examiner
Tech Ctr. 2100

Notice of References Cited

Application/Control No.

90/007,093

Applicant(s)/Patent Under
Reexamination
6085192

Examiner

Alford W. Kindred

Art Unit

2163

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,857,201	01-1999	Wright et al.	707/104.1
*	B	US-6,006,274	12-1999	Hawkins et al.	709/248
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims



Application No.

90/007,093

Examiner

Alford W. Kindred

Applicant(s)

6085192

Art Unit

2163

1	Rejected
≡	Allowed

—	(Through numeral) Cancelled
÷	Restricted

N	Non-Elected
I	Interference

A	Appeal
O	Objected

Claim	Date			
Final	Original	1/27/05		
1	✓			
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8	o			
9	✓			
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Search Notes

Application No.

90/007,093

Examiner

Alford W. Kindred

Applicant(s)

6085192

Art Unit

2163

SEARCHED

Class	Subclass	Date	Examiner
707	1-4	1/27/2005	AWK
	200,101		
	102, 103+		
	203		
709	201-202		
	248-249		

INTERFERENCE SEARCHED

Class	Subclass	Date	Examiner

**SEARCH NOTES
(INCLUDING SEARCH STRATEGY)**

	DATE	EXMR
West US, JPO, EPO, IBM, Derwent....Search	1/27/2005	AWK

OCT. 21. 2004 1:34PM

NO. 0537 P. 4

FAX RECEIVED

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OCT 21 2004

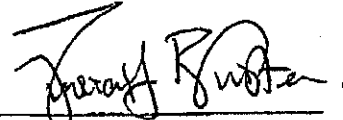
Technology Center 2100

Technology Center 2100

PROOF OF SERVICE

I hereby certify that a copy of the foregoing paper has been served upon the requester at

the address listed below, by U.S. Mail, on October 20, 2004.



Vivian Y. Buijten

Khaled Shami, Esq.
Thelen Reid & Priest LLP
225 West Santa Clara Street, 12th Floor
San Jose, CA 95113-1723

#7
Certified
Service
11/21/04

10/21/2004 15:45 FAX 703 305 3719

DIRECTOR OFFICE

001

*** RX REPORT ***

RECEPTION OK

TX/RX NO	6442
CONNECTION TEL	
CONNECTION ID	
ST. TIME	10/21 15:44
USAGE T	00'52
PGS.	4
RESULT	OK

OCT. 21. 2004 1:33PM

NO. 0537 P. 1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: Mendez *et al.* Examiner: Alford W. Kindred
Control. No.: 90/007,093 Art Unit: 2172
Filing Date: June 18, 2004
Reexamination of: 6,085,192
Atty. Docket No.: 25587-033-005 RE
Title: System and method for securely synchronizing multiple copies of a
workspace element in a network

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION UNDER 37 C.F.R. § 1.565(a)

A request for reexamination of U.S. Patent No. 6,085,192 received a filing date of June 18, 2004 and was granted on August 6, 2004. The patent owner, Visto Corporation, submits the following information under 37 C.F.R. § 1.565(a).

The following are prior or concurrent proceedings involving U.S. Patent No. 6,085,192 and the results of such proceedings:

- Visto Corp. v. Seven Networks, Inc., No. 2-03CV-333 (E.D. Tex. filed Sept. 23, 2003). Pending.
- Sproqit Technologies, Inc. v. Visto Corp., No. 04-891 (D. Minn. filed Feb. 10, 2004). Pending.
- Visto Corp. v. Sproqit Technologies, Inc., No. C-04-00651 (N.D. Cal. filed Feb. 17, 2004). Pending.
- Infowave Software, Inc. v. Visto Corp., No. 3:04-CV-01165-L (N.D. Tex. filed May 28, 2004). Dismissed with prejudice.

BEST AVAILABLE COPY

OCT. 21. 2004 1:34PM

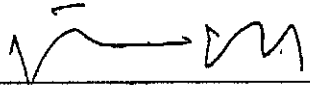
NO. 0537 P. 2

The following are proceedings that did not involve U.S. Patent No. 6,085,192, but did involve related patents including continuations-in-part:

- Visto Corp. v. Infowave Software, Inc., No. 2-03CV-332 (E.D. Tex. filed Sept. 23, 2003). Settled.
- Seven Networks, Inc. v. Visto Corp., No. C-04-01641 (N.D. Cal. filed April 27, 2004). Voluntarily dismissed by Seven without prejudice.

If the examiner would like to see a listing of docket items and/or any of the docket items for any of the cases listed above, please do not hesitate to contact the patent owner's attorney listed below.

Respectfully submitted,



Jinntung Su
Registration No. 42,174
MANATT, PHELPS & PHILLIPS LLP
1001 Page Mill Road, Building 2
Palo Alto, California 94304
650-812-1375 Telephone
650-213-0286 Facsimile

20120126.1

BEST AVAILABLE COPY

OCT. 21. 2004 1:34PM

NO. 0537 P. 3

CERTIFICATE OF FIRST CLASS MAILING
(37 C.F.R. 1.8)

I hereby certify that the attached Response, together with the attached Transmittal form, and return receipt postcard, are being deposited with the United States Postal Service as First Class Mail, in an envelope with sufficient postage, and addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

October 6, 2004

Date of Deposit

Vivian Y. Buijten

Typed Name of Person Mailing Correspondence

Signature

Date

10/06/2004

20120350.1

BEST AVAILABLE COPY



#6
Notice of
Litigation
10-22-04

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: Mendez *et al.* Examiner: Alford W. Kindred
Control. No.: 90/007,093 Art Unit: 2172
Filing Date: June 18, 2004
Reexamination of: 6,085,192
Atty. Docket No.: 25587-033-005 RE
Title: System and method for securely synchronizing multiple copies of a
workspace element in a network

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION UNDER 37 C.F.R. § 1.565(a)

A request for reexamination of U.S. Patent No. 6,085,192 received a filing date of June 18, 2004 and was granted on August 6, 2004. The patent owner, Visto Corporation, submits the following information under 37 C.F.R. § 1.565(a).

The following are prior or concurrent proceedings involving U.S. Patent No. 6,085,192 and the results of such proceedings:

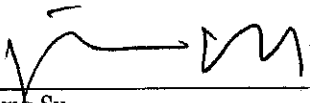
- Visto Corp. v. Seven Networks, Inc., No. 2-03CV-333 (E.D. Tex. filed Sept. 23, 2003). Pending.
- Sproqit Technologies, Inc v. Visto Corp., No. 04-891 (D. Minn. filed Feb. 10, 2004). Pending.
- Visto Corp. v. Sproqit Technologies, Inc., No. C-04-00651 (N.D. Cal. filed Feb. 17, 2004). Pending.
- Infowave Software, Inc. v. Visto Corp., No. 3:04-CV-01165-L (N.D. Tex. filed May 28, 2004). Dismissed with prejudice.

The following are proceedings that did not involve U.S. Patent No. 6,085,192, but did involve related patents including continuations-in-part:

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- Seven Networks, Inc. v. Visto Corp., No. C-04-01641 (N.D. Cal. filed April 27, 2004). Voluntarily dismissed by Seven without prejudice.

If the examiner would like to see a listing of docket items and/or any of the docket items for any of the cases listed above, please do not hesitate to contact the patent owner's attorney listed below.

Respectfully submitted,



Jinntung Su
Registration No. 42,174
MANATT, PHELPS & PHILLIPS LLP
1001 Page Mill Road, Building 2
Palo Alto, California 94304
650-812-1375 Telephone
650-213-0286 Facsimile

20120126.1



CERTIFICATE OF FIRST CLASS MAILING
(37 C.F.R. 1.8)

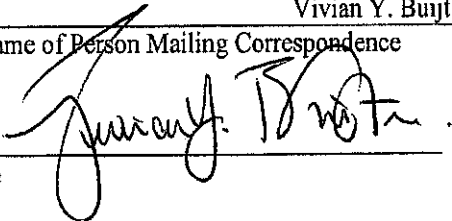
I hereby certify that the attached Response, together with the attached Transmittal form, and return receipt postcard, are being deposited with the United States Postal Service as First Class Mail, in an envelope with sufficient postage, and addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

October 6, 2004

Date of Deposit

Vivian Y. Buijten

Typed Name of Person Mailing Correspondence



Signature

10/06/2004

Date



Re Exam

PTO/SB/21 (09-04)
 Approved for use through 07/31/2006. OMB 0651-0031
 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM <small>(to be used for all correspondence after initial filing)</small>	Application Number	90/007,093
	Filing Date	06/18/2004
	First Named Inventor	Daniel J. Mendez
	Art Unit	2172
	Examiner Name	Alford W. Kindred
Total Number of Pages in This Submission	Attorney Docket Number	25587-033-005 RE

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Receipt Postcard; Certificate of 1st Class Mailing; Information Under 37 CFR 1.565(a)
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Manatt, Phelps & Phillips, LLP		
Signature			
Printed name	Jinntung Su		
Date	10-6-2004	Reg. No.	42,174

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Signature			
Typed or printed name	Vivian Y. Buijten	Date	10/06/2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

American LegalNet, Inc.
 www.USCourtForms.com


**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: ASSISTANT COMMISSIONER FOR PATENTS
Washington, D.C. 20231

APPLICATION NO/ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
90/007,093	06/18/2004	6085192	035754-007

Jinntung Su
Manatt, Phelps & Phillips LLP
1001 Page Mill Road
Building 2
Palo Alto, CA 94304

EXAMINER

Kindred, A.

ART UNIT	PAPER
2172	5

DATE MAILED: 08/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

cc: Robert E. Krebs
P.O. Box 640640
San Jose, CA 95164

Order Granting / Denying Request For Ex Parte Reexamination	Control No.	Patent Under Reexamination	
	90/007,093	6085192	
	Examiner	Art Unit	
	Alford W. Kindred***	2172	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

The request for *ex parte* reexamination filed 18 June 2004 has been considered and a determination has been made. An identification of the claims, the references relied upon, and the rationale supporting the determination are attached.

Attachments: a) ☐ PTO-892, b) ☐ PTO-1449, c) ☐ Other: _____

1. ☒ The request for *ex parte* reexamination is GRANTED.

RESPONSE TIMES ARE SET AS FOLLOWS:

For Patent Owner's Statement (Optional): TWO MONTHS from the mailing date of this communication (37 CFR 1.530 (b)). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).**

For Requester's Reply (optional): TWO MONTHS from the **date of service** of any timely filed Patent Owner's Statement (37 CFR 1.535). **NO EXTENSION OF THIS TIME PERIOD IS PERMITTED.** Patent Owner does not file a timely statement under 37 CFR 1.530(b), then no reply by requester is permitted.

2. ☐ The request for *ex parte* reexamination is DENIED.

This decision is not appealable (35 U.S.C. 303(c)). Requester may seek review by petition to the Commissioner under 37 CFR 1.181 within ONE MONTH from the mailing date of this communication (37 CFR 1.515(c)). **EXTENSION OF TIME TO FILE SUCH A PETITION UNDER 37 CFR 1.181 ARE AVAILABLE ONLY BY PETITION TO SUSPEND OR WAIVE THE REGULATIONS UNDER 37 CFR 1.183.**

As due course, a refund under 37 CFR 1.26 (c) will be made to requester:

- a) ☐ by Treasury check or,
b) ☐ by credit to Deposit Account No. _____, or
c) ☐ by credit to a credit card account, unless otherwise notified (35 U.S.C. 303(c)).

cc:Requester (if third party requester)

Application/Control Number: 90/007,093

Page 2

Art Unit: 2172

DETAILED ACTION

1. A substantial new question of patentability affecting Claims 1, 4-5, 8-11, and 14-25 of United States Patent Number 6,085,192 to Mendez is raised by the request for reexamination.
2. The request indicates that Requester considers that Claims 1, 4-5, 8-11, and 14-25 are unpatentable over U.S. Patent 5,857,201 ("Wright, Jr. et al.") taken with 6,006,274 ("Hawkins et al").
3. The Wright reference teaches a server receiving an application profile, including forms agents, tables and version number, from a client. Wright's server checks the application profile for currency information and imposes a synchronization element if necessary for updating purposes.
4. It is agreed that the consideration of Wright in view of Hawkins, raises a substantial new question of patentability as to Claims 1-4-5, 8-11, and 14-25 of the Mendez patent. For example, Hawkins teaches the use of a firewall when accessing the Internet. Hawkins's "Firewall" is equivalent to Mendez's use of a firewall. This firewall teaching of Hawkins, clearly teach the use of firewall protection in regards to the exchange of information between clients and servers which is synonymous to applicant's claim language involving the use of firewall protection during the synchronizing and updating of networking data. Therefore, there is a substantial likelihood that a reasonable examiner would consider this teaching important in deciding whether or not the claim is patentable. Accordingly, Wright combined with Hawkins, raises a substantial new question of patentability as to Claims 1-4-5, 8-11, and 14-25, which question has not been decided in a previous examination of the Mendez patent.
7. All Claims will be reexamined.

Application/Control Number: 90/007,093

Page 3

Art Unit: 2172

Conclusion

8. Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extension of time in reexamination proceedings are provided for in 37 CFR 1.550(c).

9. The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent No. 5,584,025 throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alford W. Kindred whose telephone number is 703-305-3802. The examiner can normally be reached on Mon-Fri 9:00 am- 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (703) 305-9790.

Application/Control Number: 90/007,093

Page 4

*Art Unit: 2172

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alford W. Kindred
Patent Examiner
Tech Ctr. 2100

3300793 : 00000000

Patent Assignment Abstract of Title

2

Total Assignments: 7**Application #:** 08835997 **Filing Dt:** 04/11/1997**Patent #:** 6085192**Issue Dt:** 07/04/2000**PCT #:** NONE**Publication #:** NONE**Pub Dt:****Inventors:** DANIEL J. MENDEZ, MARK D. RIGGINS, PRASAD WAGLE, CHRISTINE C. YING**Title:** SYSTEM AND METHOD FOR SECURELY SYNCHRONIZING MULTIPLE COPIES OF A WORKSPACE ELEMENT IN A NETWORK**Assignment: 1**

Reel/Frame: 008506/0439	Received: 05/20/1997	Recorded: 04/11/1997	Mailed: 06/25/1997	Pages: 2
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Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).**Assignors:** MENDEZ, DANIEL J.**Exec Dt:** 04/11/1997

RIGGINS, MARK D.

Exec Dt: 04/11/1997

WAGLE, PRASAD

Exec Dt: 04/11/1997

YING, CRISTHINE C.

Exec Dt: 04/11/1997**Assignee:** ROAMPAGE, INC.

156 EAST DANA STREET

MOUNTAIN VIEW, CALIFORNIA 94041

Correspondent: CARR, DEFILIPPO & FERRELL LLP
 MARC A. SOCKOL
 2225 EAST BAYSHORE ROAD, STE. 200
 PALO ALTO, CA 94303

Assignment: 2

Reel/Frame: 010685/0695	Received: 04/18/2000	Recorded: 03/20/2000	Mailed: 06/13/2000	Pages: 18
--------------------------------	-----------------------------	-----------------------------	---------------------------	------------------

Conveyance: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).**Assignor:** ROAMPAGE, INC.**Exec Dt:** 08/12/1997**Assignee:** VISTO CORPORATION

1937 LANDINGS DRIVE

MOUNTAIN VIEW, CALIFORNIA 94043

Correspondent: GRAHAM & JAMES LLP
 MARC A. SOCKOL
 600 HANSEN WAY
 PALO ALTO, CA 94304-1043

Assignment: 3

Reel/Frame: 009094/0488	Received: 04/20/1998	Recorded: 04/06/1998	Mailed: 06/11/1998	Pages: 7
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Conveyance: SECURITY AGREEMENT**Assignor:** VISTO CORPORATION**Exec Dt:** 03/31/1998**Assignee:** SILICON VALLEY BANK

1731 EMBARCADERO ROAD, SUITE 220

PALO ALTO, CALIFORNIA 94303

Correspondent: GRAY CARY WARE & FREIDENRICH
 ERIN O'BRIEN
 400 HAMILTON AVENUE
 PALO ALTO, CALIFORNIA 94301

Assignment: 4

Reel/Frame: 011052/0664 **Received:** 09/14/2000 **Recorded:** 08/09/2000 **Mailed:** 11/14/2000 **Pages:** 24

Conveyance: SECURITY INTEREST (SEE DOCUMENT FOR DETAILS).

Assignor: VISTO CORPORATION

Exec Dt: 08/03/2000

Assignee: SAND HILL CAPITAL II, LP
BUILDING 2, SUITE 110
3000 SAND HILL ROAD
MENLO PARK, CALIFORNIA 94025

Correspondent: LEVY, SMALL & LALLAS
SEBASTIAN CAMUA
815 MORAGA DRIVE
LOS ANGELES, CA 90049

Assignment: 5

Reel/Frame: 011742/0974 **Received:** 05/07/2001 **Recorded:** 04/30/2001 **Mailed:** 07/17/2001 **Pages:** 7

Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

Assignors: SAND HILL CAPITAL II, L.P.

Exec Dt: 12/11/2000

SAND HILL CAPITAL II Q, L.P.

Exec Dt: 12/11/2000

SAND HILL CAPITAL, LLC

Exec Dt: 12/11/2000

Assignee: FB COMMERCIAL FINANCE, INC.
135 NORTH MERAMEC AVENUE
ST. LOUIS, MISSOURI 63105

Correspondent: GRAY, CARY, WARE & FREIDENRICH
ERIN O'BRIEN
400 HAMILTON AVENUE
PALO ALTO, CA 94301

Assignment: 6

Reel/Frame: 013776/0491 **Received:** 02/26/2003 **Recorded:** 02/13/2003 **Mailed:** 07/07/2003 **Pages:** 3

Conveyance: RELEASE

Assignor: SILICON VALLEY BANK

Exec Dt: 02/13/2003

Assignee: VISTO CORPORATION
275 SHORELINE DR STE 300
REDWOOD SHORES, CALIFORNIA 94065

Correspondent: SILICON VALLEY BANK
BRYAN BRITTINGHAM
3003 TASMAN DR.
LOAN DOCUMENTATION HA155
SANTA CLARA, CA 95054

Assignment: 7

Reel/Frame: 014351/0887 **Received:** 08/11/2003 **Recorded:** 08/07/2003 **Mailed:** 02/23/2004 **Pages:** 2

Conveyance: CHANGE OF ADDRESS

Assignor: VISTO CORPORATION

Exec Dt: 08/04/2003

Assignee: VISTO CORPORATION
275 SHORELINE DRIVE, SUITE 300



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

REEXAM CONTROL NUMBER	FILING OR 371 (c) DATE	PATENT NUMBER
90/007,093	06/18/2004	6085192

3

CONFIRMATION NO. 9956

Robert E. Krebs
 P. O. Box 640640
 San Jose, CA 95164

Date Mailed: 06/24/2004

NOTICE OF REEXAMINATION REQUEST FILING DATE

(Third Party Requester)

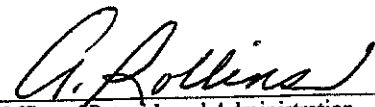
Requester is hereby notified that the filing date of the request for reexamination is 06/18/2004, the date the required fee of \$2,520 was received.

A decision on the request for reexamination will be mailed within three months from the filing date of the request for reexamination. (See 37 CFR 1.515(a)).

A copy of the Notice is being sent to the person identified by the requester as the patent owner. Further patent owner correspondence will be the latest attorney or agent of record in the patent file. (See 37 CFR 1.33). Any paper filed should include a reference to the present request for reexamination (by Reexamination Control Number).

cc: Patent Owner

Jinntung Su
 Manatt, Phelps & Phillips LLP
 1001 Page Mill Road
 Building 2
 Palo Alto, CA 94304


 Office of Patent Legal Administration
 Central Reexamination Unit (703) 308-9692

PART 3 - OFFICE COPY



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REEXAM CONTROL NUMBER	FILING OR 371 (c) DATE	PATENT NUMBER
90/007,093	06/18/2004	6085192 #4

CONFIRMATION NO. 9956

REEXAM ASSIGNMENT NOTICE

Jinntung Su
 Manatt, Phelps & Phillips LLP
 1001 Page Mill Road
 Building 2
 Palo Alto, CA 94304

Date Mailed: 06/24/2004

NOTICE OF ASSIGNMENT OF REEXAMINATION REQUEST

The above-identified request for reexamination has been assigned to Art Unit 2171. All future correspondence to the proceeding should be identified by the control number listed above and directed to the assigned Art Unit.

A copy of this Notice is being sent to the latest attorney or agent of record in the patent file or to all owners of record. (See 37 CFR 1.33(c)). If the addressee is not, or does not represent, the current owner, he or she is required to forward all communications regarding this proceeding to the current owner(s). An attorney or agent receiving this communication who does not represent the current owner(s) may wish to seek to withdraw pursuant to 37 CFR 1.36 in order to avoid receiving future communications. If the address of the current owner(s) is unknown, this communication should be returned within the request to withdraw pursuant to Section 1.36.

cc: Third Party Requester(if any)

Robert E. Krebs
 P.O. Box 640640
 San Jose, CA 95164

Office of Patent Legal Administration
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PART 3 - OFFICE COPY

(Also referred to as FORM PTO - 1465)

REQUEST FOR EX PARTE REEXAMINATION TRANSMITTAL FORM

Address to:

Mail Stop Ex Parte Reexam
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Attorney Docket No. 035754-007

Date: June 15, 2004

1. ☒ This is a request for *ex parte* reexamination pursuant to 37 CFR 1.510 of patent number 6,085,192 issued July 4, 2000. The request is made by:

☐ patent owner. ☒ third party requester.
2. ☒ The name and address of the person requesting reexamination is:

Seven Networks, Inc.
901 Marshall Street
Redwood City, CA 94063
3. ☒ a. A check in the amount of \$2520.00 is enclosed to cover the reexamination fee, 37 CFR 1.20(c)(i); or
☐ b. The Director is hereby authorized to charge the fee as set forth in 37 CFR 1.20(c)(i) to Deposit Account No. _____; or
☐ c. Payment by credit card. Form PTO-2038 is attached.
4. ☒ Any refund should be made by ☐ check or ☒ credit to Deposit Account No. 50-1698. 37 CFR 1.26(c). If payment is made by credit card, refund must be to credit card account.
5. ☒ A copy of the patent to be reexamined having a double column format on one side of a separate paper is enclosed. 37 CFR 1.510(b)(4)
6. ☐ CD-ROM or CD-R in duplicate, Computer Program (Appendix) or large table
7. ☐ Nucleotide and/or Amino Acid Sequence Submission
If applicable, all of the following are necessary
 - a. ☐ Computer Readable Form (CRF)
 - b. Specification Sequence Listing on:
 - i ☐ CD-ROM (2 copies) or CD-R (2 copies); or
 - ii ☐ paper
 - c. Statements verifying identity of above copies
8. ☐ A copy of any disclaimer, certificate of correction or reexamination certificate issued in the patent is included.
9. ☒ Reexamination of claim(s) 1, 4, 5, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 and 25 is requested.
10. ☒ A copy of every patent or printed publication relied upon is submitted herewith including a listing thereof on Form PTO-1449 or equivalent.
11. ☐ An English language translation of all necessary and pertinent non-English language patents or printed publications is included.

[Page 1 of 2]

06/24/2004 NTWITTY 00000003 90007093

This collection of information is required by 37 CFR 1.510. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Ex Parte Reexam, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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90007093

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12. ☒ The attached detailed request includes at least the following items:
- A statement identifying each substantial new question of patentability based on prior patents and printed publication. 37 CFR 1.510(b)(1)
 - An identification of every claim for which reexamination is requested, and a detailed explanation of the pertinency and manner of applying the cited prior art to every claim for which reexamination is requested. 37 CFR 1.510(b)(2)
13. ☐ A proposed amendment is included (only where the patent owner is the requester). 37 CFR 1.510(e)

14. ☒ a. It is certified that a copy of this request (if filed by other than the patent owner) has been served in its entirety on the patent owner as provided in 37 CFR 1.33(c).

The name and address of the party served and the date of service are:

Marc Sockol, Squire Sanders and Dempsey, LLP

600 Hansen Way

Palo Alto, CA 94304

Date of Service: 6/15/04; or

- ☐ b. A duplicate copy is enclosed since service on patent owner was not possible.

15. ☒ Correspondence Address : Direct all communication about the reexamination to:

☐ Customer Number

OR

<input type="checkbox"/> Firm or Individual Name	Robert E. Krebs				
Address (line 1)	P.O. Box 640640				
Address (line 2)					
City	San Jose	State	CA	Zip	95164
Country	USA				
Telephone	408-292-5800	Fax	408-287-8040		

16. ☒ The patent is currently the subject of the following concurrent proceeding(s):

- ☐ a. Copending reissue Application No. _____
- ☒ b. Copending reexamination Control No. 90/007,040.
- ☐ c. Copending Interference No. _____
- ☒ d. Copending litigation styled:

Visto Corporation v. Seven Networks, Inc.; U.S.D.C., Eastern District of Texas Marshall Division, Case No. 2-03CV-333 (TIW)

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Authorized Signature

June 15, 2004

Date

☐ For Patent Owner Requester

Khaled Shami

38,745

☒ For Third Party Requester

Typed/Printed Name

Registration No., if applicable

PATENT**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent of Mendez et al.

Patent No. 6,085,192

Issued: July 4, 2000

Title: SYSTEM AND METHOD FOR SECURELY SYNCHRONIZING MULTIPLE COPIES
OF A WORKSPACE ELEMENT IN A NETWORK

REQUEST FOR REEXAMINATION

Mail Stop *Ex Parte* Reexam
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Reexamination under 35 U.S.C. 302 – 307 and 37 C.F.R. 1.510 is requested of United States patent number 6,085,192 which issued on July 4, 2000, to Mendez et al. (hereinafter “Mendez” or “Mendez patent”). This patent is still enforceable.

I. Claims for which reexamination is requested:

Reexamination is requested of Claims 1, 4, 5, 8 – 11, and 14 – 25 of the Mendez patent in view of the following prior art publications, which are listed on the attached Information Disclosure Statement form and of which copies are enclosed:

1. U. S. pat. no. 5,857,201 to Wright, Jr. et al., issued January 5, 1999 (hereinafter “Wright” or “Wright patent”).
2. U. S. pat. no. 6,006,274 to Hawkins et al., issued December 21, 1999 (hereinafter “Hawkins” or “Hawkins patent”).

II. Explanation of pertinency and manner of applying cited prior art to every claim for which reexamination is requested based on prior art:

A. Claims 1, 4, 5, 8 and 9

Claims 1, 4, 5, 8 and 9 of the Mendez patent are considered to be unpatentable under 35 U.S.C. 103(a) based on Wright in view of Hawkins.

Wright is directed to a system for synchronizing a handheld device with an enterprise computer network.¹ Synchronization is effected in order to update information stored in respective databases in the handheld device and in the network.² Examples of such information are e-mail, product inventory, work orders, and price lists.³ Updates are initiated by a server on the network and are based on comparisons of version information.⁴ The discussion below will show the Wright discloses all of the limitations of Claim 1, with the exception of a firewall, and that a firewall would have been obvious in view of its disclosure in Hawkins.

Claim 1 of the Mendez patent reads as follows:

A computer-based method comprising the steps of:

- (a) generating first examination results from first version information which indicates whether a first workspace element stored at a first store within a firewall has been modified;
- (b) generating second examination results from second version information which indicates whether an independently-modifiable copy of the first workspace element has been modified, the copy being stored at a second store outside the firewall;
- (c) initiating steps (a) and (b) from within the firewall when predetermined criteria have been satisfied;
- (d) generating a preferred version from the first workspace element and from the copy based on the first and second examination results; and
- (e) storing the preferred version at the first store and at the second store.

The system of Wright is clearly computer-based, as the principal devices involved are computers and the methods effected are software steps executed in these computers.

Wright states that the server (132) "maintains an administration profile which is a list of the most current applications and the version numbers of the applications and their forms, agents

¹ Wright, Title.

² *Id.*, Abstract, last sentence.

³ *Id.*, col. 7, ll. 4 – 8; col. 11, ll. 20 – 21.

⁴ *Id.*, col. 11, ll. 11 – 14.

and tables.”⁵ This administration profile represents the first examination results as it contains the most current information, which would reflect any modifications.

Additionally, Wright states that the server (132) receives from the client (136) an application profile, which is a “list of all [the client’s] applications and includes forms, agents, tables and respective version numbers.”⁶ This application profile represents the second examination results as it contains information reflecting whether the workspace element has been modified. In addition, Wright expressly states that “[t]he server also checks the application profile received from the client against its administration profile to determine if the client applications are current as determined from the version numbers.”⁷

The workspace element in this particular discussion in Wright is software contained in the client and server databases. However, other information, such as e-mail, work orders, price lists, and inventory,⁸ can be included and similarly modified.

Synchronization in Wright is initiated by the server.⁹ Specifically, Wright states that “server 132 can query the client database 172, add data to the client database, or remove data from the client database in order make (*sic*) updates to both the client and server databases to reflect changes that have happened on both sides since the last connection.”¹⁰

Based on the above procedures, the server in Wright generates a preferred version of the workspace element. According to Wright, “[i]f any applications are not current, a synchronization software operation 240 is initiated by the server to update the client machine. The most current applications(s) are then sent over to the client using a handshaking mechanism.”¹¹

Sending the most current version from the server to the client results in storage of the preferred version at the first store (network database 180) and at the second store (client database 172).

Wright discloses all the limitations of Claim 1 of Mendez, except for a firewall behind which the first store of the server lies, and outside of which the second store of the client lies. The context of Wright is that of a networked enterprise computer environment, for which security is paramount. The use of firewalls in networks, particularly enterprise networks which can be accessed through the Internet, was standard practice and would have been obvious to one of ordinary skill in the art at the time of the alleged invention of Claim 1 of Mendez. Without a firewall such networks, with their sensitive proprietary information, would be vulnerable to attacks by anyone with Internet access. This vulnerability, and the need to guard against it, were recognized at the time of the alleged invention of Mendez.

⁵ *Id.*, col. 11, ll. 4 – 7.

⁶ *Id.*, col. 11, ll. 2 – 4.

⁷ *Id.*, col. 11, ll. 11 – 14.

⁸ *Id.*, col. 7, ll. 4 – 8.

⁹ *Id.*, col. 11, l. 15.

¹⁰ *Id.*, col. 5, ll. 54 – 58.

¹¹ *Id.*, col. 11, ll. 13 – 19.

Hawkins, which is also directed to file synchronization in networked computer systems, demonstrates the ubiquitous use of protective firewalls. In Hawkins, files stored in portable computer 710 are synchronized with those stored in a remote "preferred PC" 760 across the Internet.¹² As seen from Figure 7 of Hawkins, the preferred PC is a part of an internal LAN (local area network) whose accessibility from the Internet 780 is protected by firewall/proxy server 790.

As discussed above, the use of a firewall is standard practice in enterprise networking environments, and one of ordinary skill in the art, seeking to provide an additional layer of protection for the synchronization system of Wright, would have looked to the teachings of Hawkins, which shows just such a synchronization system, but with the addition of the protective firewall.

The disclosures of Wright and Hawkins are therefore properly combinable. Such a combination teaches all of the limitations of Claim 1 of Mendez. Claim 1 of Mendez therefore is unpatentable over the prior art and should be rejected.

Regarding Claims 4 and 5, Wright states that synchronization can include "retrieving data that has been collected by the client since the last connection, or inserting new data in the database that has been added on the FL server 132 since the last connection."¹³ Reference to the last connection clearly implies time records are kept in Wright, and these could obviously include date and time.

Regarding Claim 8, any data sent from the client to the server, or from the server to the client in Wright, can be considered data selected to be preferred versions.

The Claim 9 limitation of "locating the first workspace element, the first versions information, the copy and the second version information" is inherently met by Wright as a system which could not locate these components could not operate on them in the manner described in the patent.

B. Claims 10, 11 and 14 – 20

Claims 10, 11 and 14 – 20 of the Mendez patent are considered to be unpatentable under 35 U.S.C. 103(a) based on Wright in view of Hawkins.

Claim 10 of the Mendez patent reads as follows:

A system comprising:
a general synchronization module for operating within a
first firewall and for examining first version
information to determine whether a first workspace
element has been modified;

¹² Hawkins, col. 10, ll. 27 – 30.

¹³ Wright, col. 5, l. 65 – col. 6, l. 1.

- a synchronization agent for operating outside the first firewall and for forwarding to the general synchronization module second version information which indicates whether an independently modifiable copy of the first workspace element has been modified;
- a synchronization-start module for operating within the first firewall and for initiating the general synchronization module and the synchronization agent when predetermined criteria have been satisfied;
- means for generating a preferred version from the first workspace element and from the copy by comparing the first version information and the second version information; and
- means for storing the preferred version at the first store and the second store.

The synchronization processes of Wright are performed in the server 132 by communications agents that encapsulate communications sessions.¹⁴ The communications agents "know how to connect to a particular host, perform a set of operations or tasks, which usually include synchronizing the host data source, e.g., 180, with the client database 172, and then disconnecting."¹⁵ As discussed above, the need for synchronization is determined based on a comparison of version information.

In Wright, FL Engine 160 running on the client machine operates as a synchronization agent. FL Engine 160 sends to the server an application profile, which is a "list of all [the client's] applications and includes forms, agents, tables and respective version numbers."¹⁶ Such an application profile would inherently indicate whether the independently modifiable copies have been modified.

Wright further states that synchronization is initiated by the server,¹⁷ and that the server "can query the client database 172, add data to the client database, or remove data from the client database in order make (*sic*) updates to both the client and server databases to reflect changes that have happened on both sides since the last connection."¹⁸ Wright emphasizes the ability of the server to manipulate the information in the client.¹⁹

The server in Wright generates a preferred version based on the comparison of version information. According to Wright, "[i]f any applications are not current, a synchronization

¹⁴ *Id.*, col. 6, ll. 42 – 45.

¹⁵ *Id.*, col. 6, l. 64 – col. 7, l. 1.

¹⁶ *Id.*, col. 11, ll. 2 – 4.

¹⁷ *Id.*, col. 11, l. 15.

¹⁸ *Id.*, col. 5, ll. 54 – 58.

¹⁹ See, e.g., Wright, col. 5, ll. 52 – 54; col. 8, ll. 21 – 22.

software operation 240 is initiated by the server to update the client machine. The most current applications(s) are then sent over to the client using a handshaking mechanism.”²⁰

Copies of the updated version are stored by the server at databases 180 (in the server) and 172 (in the client).

While Wright does not disclose a firewall, as discussed above, the use of a firewall to protect an enterprise server is well known in the art. Hawkins teaches such a protection scheme, which would have been obvious to one of ordinary skill in the art at the time of the Mendez alleged invention.

Regarding Claim 11, a communications module 184 is shown in Wright.

Claims 14 – 20 relate to time records and are similar to Claims 4, 5, 8, and 9 discussed above. The same reasoning therefore applies to Claims 14 – 20, which should be rejected accordingly.

C. Claim 21

Claim 21 is an apparatus claim version of Claim 1, written in means-plus-function form. The same reasoning applied to Claim 1 above applies to 21, which should be rejected accordingly.

D. Claim 22

Claim 22 is a computer-readable storage medium (Beauregard) version of Claim 1. The same reasoning applied to Claim 1 above therefore also applies to Claim 22, which should be rejected accordingly.

E. Claim 23

Claim 23 differs from Claim 22 in the last step (e), which requires that both the first workspace element and a copy thereof be stored at the first store. Wright discloses this feature as well, stating that while in the preferred embodiment a record sent from the client to the server is then deleted at the server, in a second embodiment, after the record is received at the server, “the record is maintained at the client.”²¹

²⁰ Wright, col. 11, ll. 13 – 19.

²¹ Id., col. 11, ll. 47 – 48.

F. Claim 24

Claim 24 is a means-plus-function version of Claim 23. The same reasoning therefore applies to Claim 24, which should be rejected accordingly.

G. Claim 25

Claim 25 reads as follows:

- A system comprising:
- a global server for operating outside a firewall and including memory for storing first workspace data and corresponding first version information; and
 - a synchronization agent for managing the first workspace data and the corresponding version information and for communicating with remote clients; and
 - a remote client for operating within the firewall and including memory for storing second workspace data and corresponding second version information;
- means for cooperating with the synchronization agent to synchronize the first workspace data with the second workspace data by examining the first version information and the second version information; and
- a synchronization-start module for initiating workspace data synchronization between the global server and the remote client.

Wright, in FIG. 2, shows the network environment in which server 132 operates. Wright describes server 132 as an intermediate server,²² and as a gateway server.²³ This is equivalent to the “global server” term used in Claim 25 of Mendez. Server 132 includes memory (database 180) for storing workspace data. Corresponding version information is also stored, inevitably in memory, in the form of an administration profile.²⁴

Server 132 communicates with clients 136, using communications agents “designed to encompass the fundamental operations that are needed to exchange data between a client and a host for a particular application.”²⁵ Such an operation includes synchronization, and these agents can therefore be considered synchronization agents.

Wright discloses a remote client 136 having a database 172 for storing workspace data. An application profile which is a “list of all [the client’s] applications and includes forms, agents,

²² *Id.*, col. 6, l. 32.

²³ *Id.*, col. 6, l. 28.

²⁴ *Id.*, col. 11, ll. 4 – 7.

²⁵ *Id.*, col. 7, ll. 8 – 11.

tables and respective version numbers²⁶ is also stored at the client, inevitably at a memory such as database 172.

Wright states that "[t]he server also checks the application profile received from the client against its administration profile to determine if the client applications are current as determined from the version numbers."²⁷ The server 132, or the agents therein, thus cooperate to perform synchronization.

Wright states that synchronization between the server and the client is initiated by the server.²⁸

Thus, with the exception of a firewall, Wright discloses all the limitations of Claim 25. As noted above, a firewall would have been obvious to one of ordinary skill in the art seeking to provide protection for an enterprise network. Such a firewall is shown in Hawkins.

III. Statement pointing out substantial new question of patentability:

Neither Wright nor Hawkins is of record in the prosecution file of the Mendez patent. In accordance with the discussion above, these prior art documents raise a substantial new question of patentability of Claims 1, 4, 5, 8 - 11, and 14 - 25. Further, these prior art documents are closer to the subject matter of the Mendez patent than any prior art which was cited during the prosecution of the patent application, and provide teachings not provided during prosecution.

Respectfully submitted,
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Dated: June 15, 2004

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²⁶ *Id.*, col. 11, ll. 2 - 4.

²⁷ *Id.*, col. 11, ll. 11 - 14.

²⁸ *Id.*, col. 11, ll. 15.

United States Patent [19]

Mendez et al.

[11] Patent Number: 6,085,192

[45] Date of Patent: Jul. 4, 2000

[54] SYSTEM AND METHOD FOR SECURELY
SYNCHRONIZING MULTIPLE COPIES OF A
WORKSPACE ELEMENT IN A NETWORK[75] Inventors: Daniel J. Mendez, Mountain View;
Mark D. Riggins, San Jose; Prasad
Wagle, Santa Clara; Christine C. Ying,
Foster City, all of Calif.

[73] Assignee: RoamPage, Inc., Mountain View, Calif.

[21] Appl. No.: 08/835,997

[22] Filed: Apr. 11, 1997

[51] Int. Cl.⁷ G06F 17/30[52] U.S. Cl. 707/10; 707/203; 707/104;
707/1; 707/9; 707/10[58] Field of Search 707/203, 104,
707/1, 9, 10

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(List continued on next page.)

Primary Examiner—Wayne Amsbury

Assistant Examiner—Shahid Alam

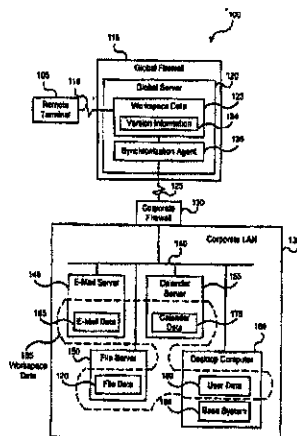
Attorney, Agent, or Firm—Graham & James LLP

[57]

ABSTRACT

A system includes a general synchronization module at the client site for operating within a first firewall and for examining first version information to determine whether a first workspace element has been modified. The system further includes a synchronization agent at a global server for operating outside the first firewall and for forwarding to the general synchronization module second version information which indicates whether an independently-modifiable copy of the first workspace element has been modified. A synchronization-start module is maintained at the client site for operating within the first firewall and for securely initiating the general synchronization module and the synchronization agent when predetermined criteria have been satisfied. The system further includes means for generating a preferred version from the first workspace element and from the copy by comparing the first version information and the second version information, and means for storing the preferred version at the first store and at the second store.

25 Claims, 6 Drawing Sheets



Article by S. Cobb, entitled: "Establishing Firewall Policy-"
Published by National Computer Security Assn. on Jun.
25-27, 1996, pp. 198-205.

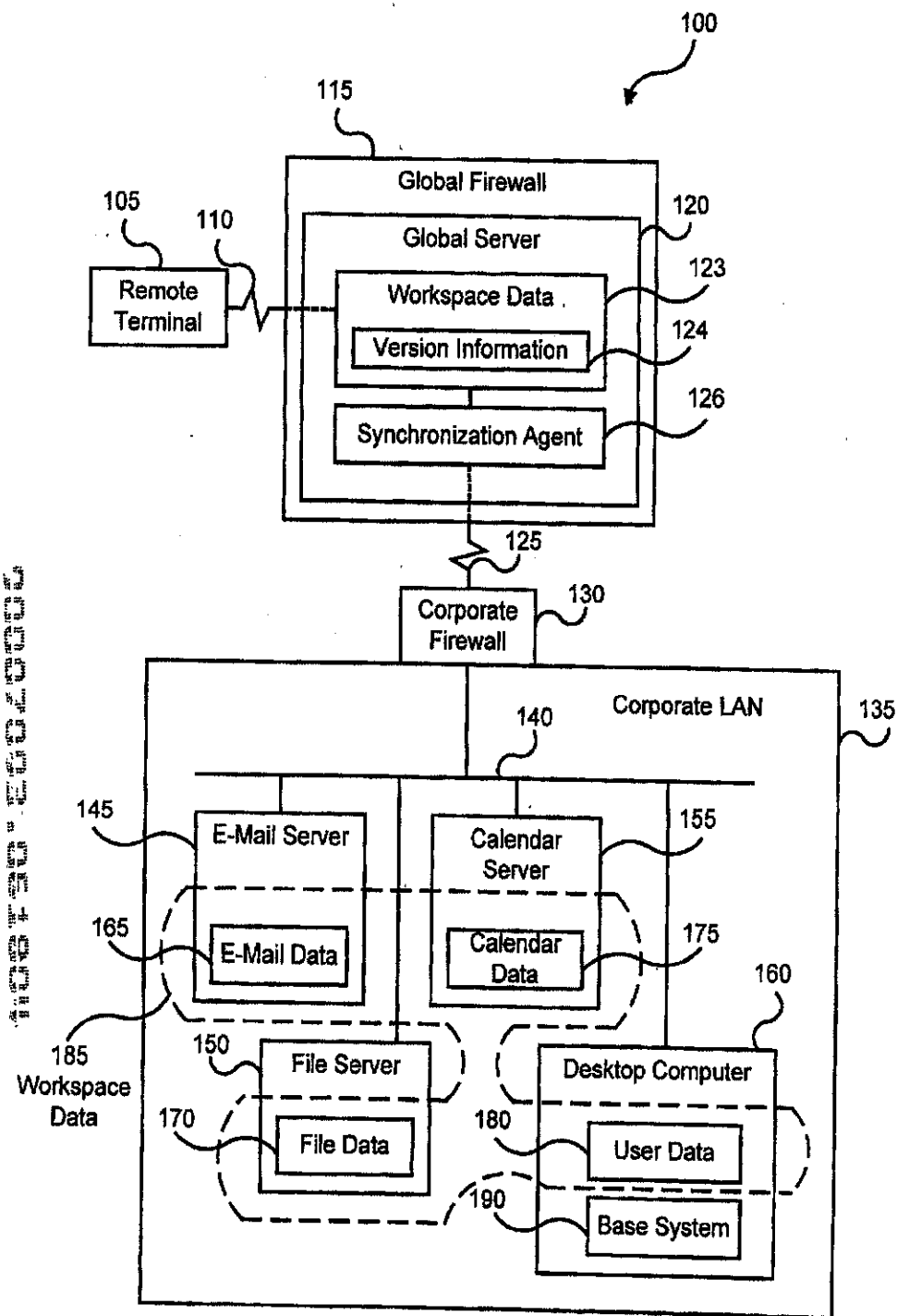


FIG. 1

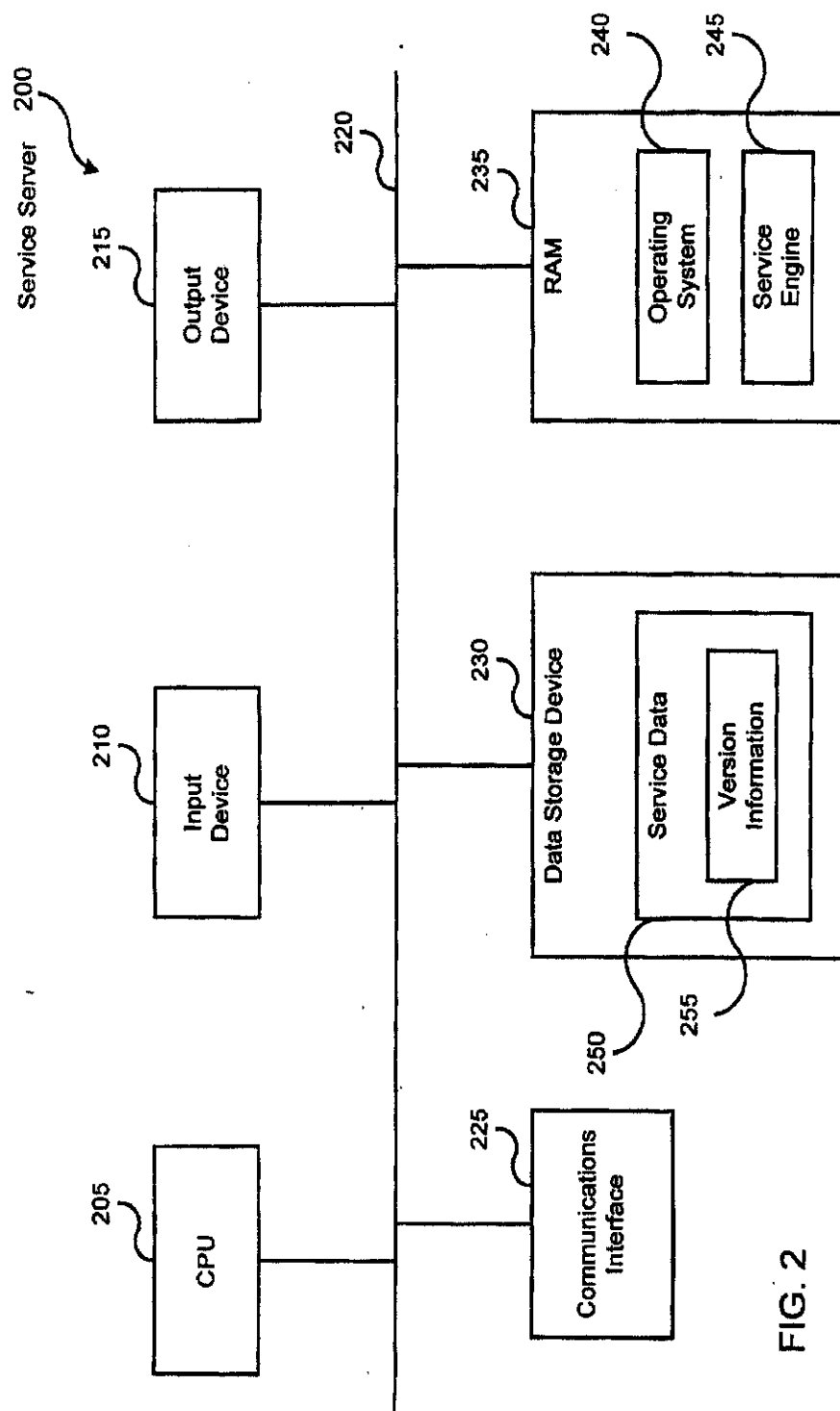


FIG. 2

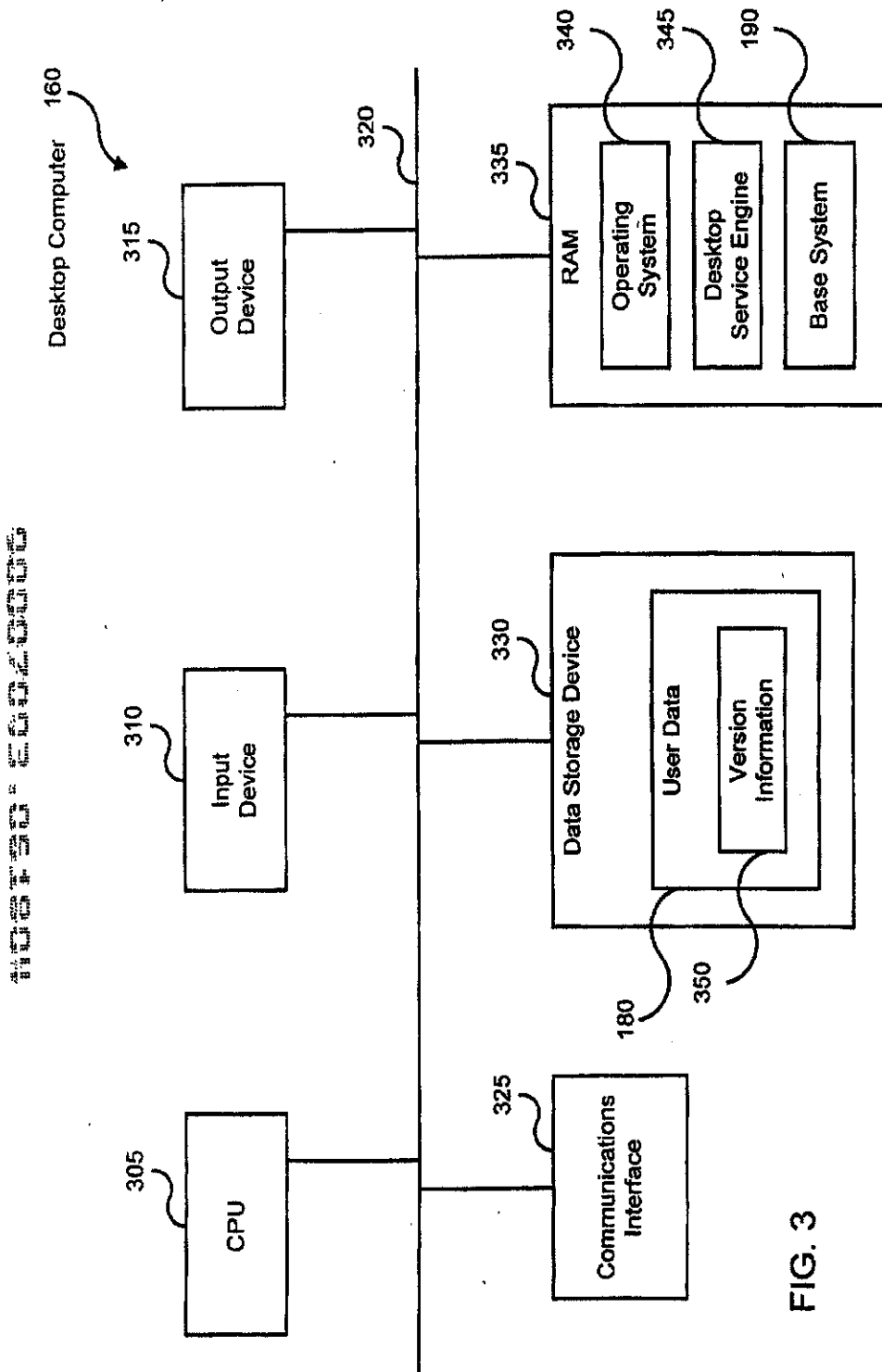


FIG. 3

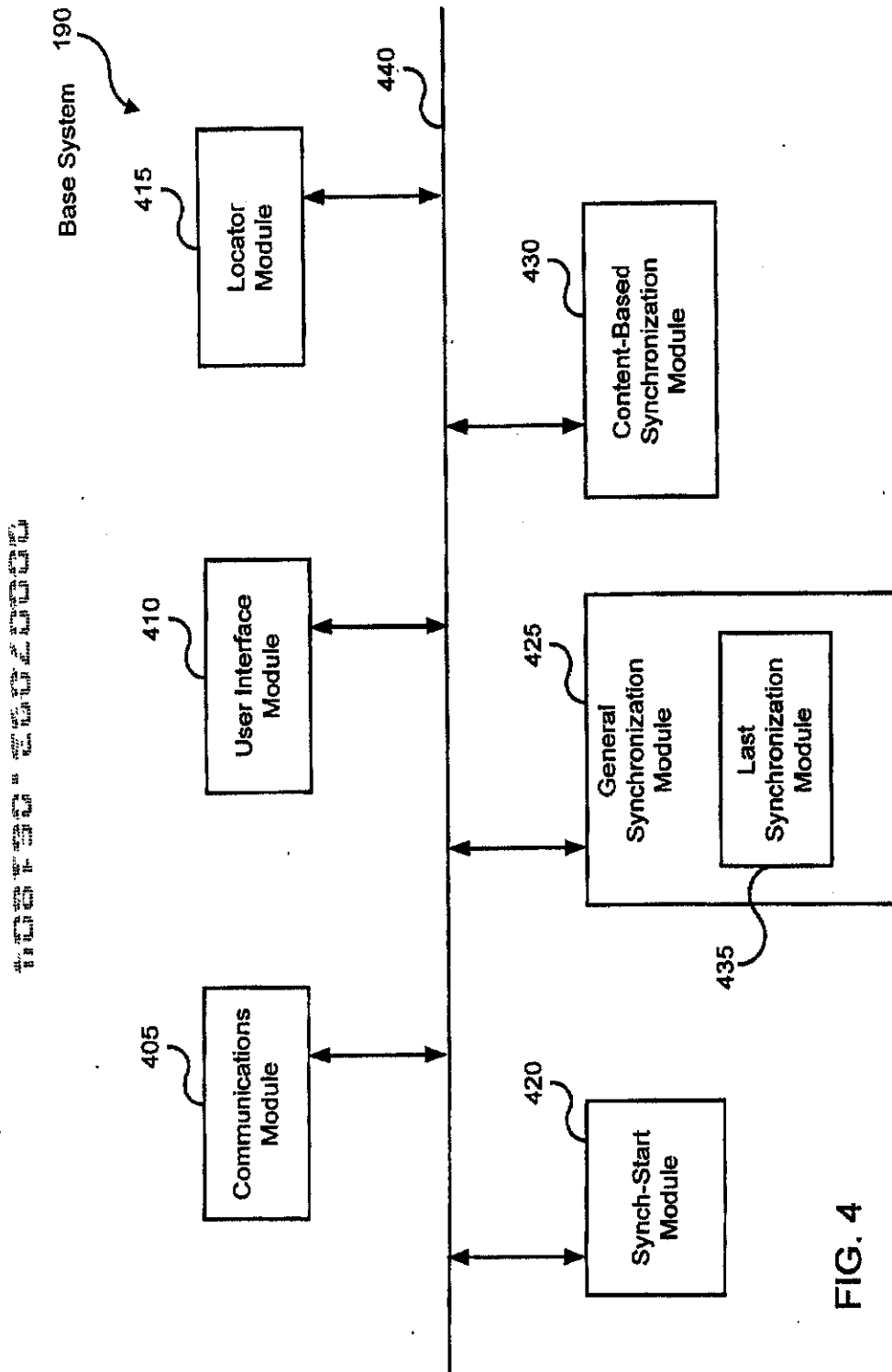


FIG. 4

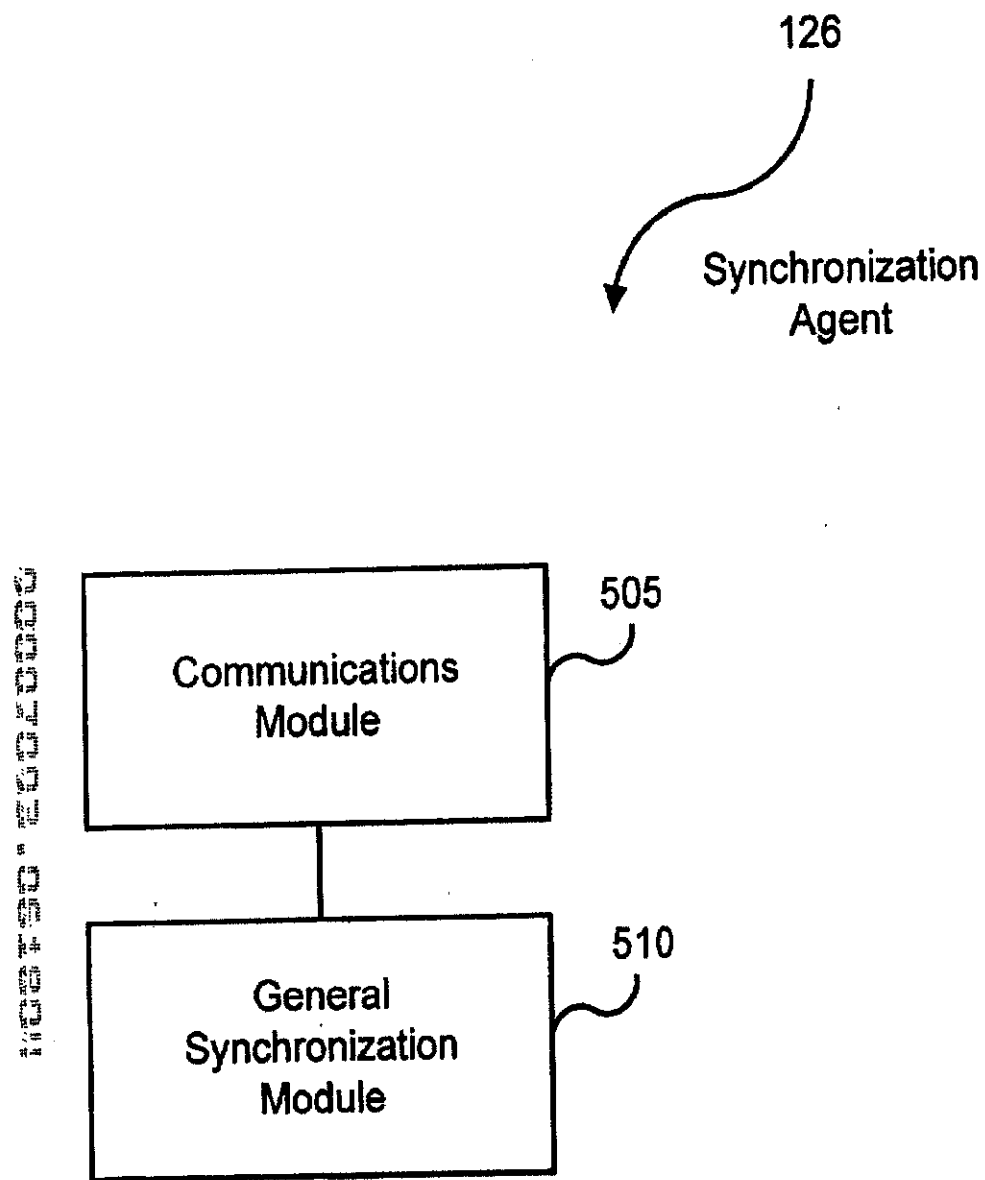


FIG. 5

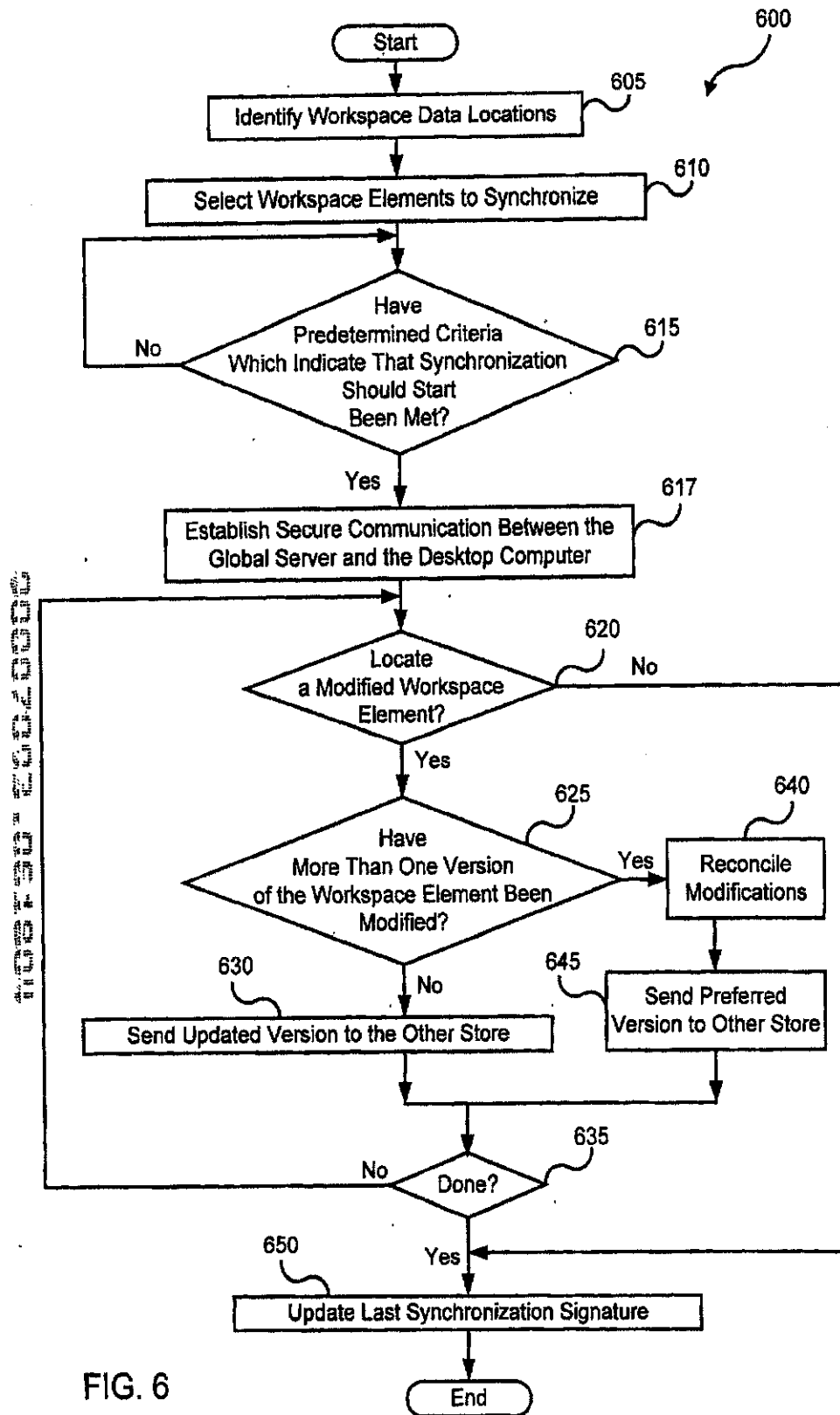


FIG. 6

6,085,192

1

SYSTEM AND METHOD FOR SECURELY SYNCHRONIZING MULTIPLE COPIES OF A WORKSPACE ELEMENT IN A NETWORK

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is related to co-pending patent application entitled "System and Method for Globally Accessing Computer Services," Ser. No. 08/766,307, now pending, filed on Dec. 13, 1996, by inventors Mark D. Riggins, R. Stanley Bailes, Hong Q. Bui, David J. Cowan, Daniel J. Mendez, Mason Ng, Sean Michael Quinlan, Prasad Wagle, Christine C. Ying, Christopher R. Zuleeg and Joanna A. Aptekar-Strober; and to co-pending patent application entitled "System and Method for Enabling Secure Access to Services in a Computer Network," Ser. No. 08/841,950, now pending, filed on Apr. 8, 1997, by inventor Mark Riggins, both of which are hereby incorporated by reference. These related applications have been commonly assigned to RoamPage, Inc.

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates generally to computer networks, and more particularly to a system and method for securely synchronizing multiple copies of a workspace element such as a file in a secure network.

Description of the Background Art

Data consistency is a significant concern for computer users. For example, when maintaining multiple independently-modifiable copies of a document, a user risks using an outdated version. Further, by the time the user notices the inconsistency, interparty miscommunication or data loss may have resulted. The user must then spend more time attempting to reconcile the inconsistent versions.

The problem of data inconsistency is exacerbated when multiple copies of a document are maintained at different network locations. For example, due to network security systems such as conventional firewall technology, a user may have access only to a particular one of these network locations. Without access to the other sites, the user cannot confirm that the version on the accessible site is the most recent draft.

Therefore, a system and method are needed for providing users with data consistency, and more particularly for synchronizing multiple copies of a workspace element such as a document in the secure network environment.

SUMMARY OF THE INVENTION

The present invention provides a system and method for synchronizing multiple copies of a workspace element in a secure network environment. The secure network environment includes a global server connected to multiple clients. Using the present system and method, the clients automatically synchronize workspace data between multiple sites, independent of whether the sites are protected by site firewalls.

The present system includes a general synchronization module at the client site for operating within a first firewall and for examining first version information to determine whether a first workspace element has been modified. The system further includes a synchronization agent at the global server for operating outside the first firewall and for forwarding to the general synchronization module second version information which indicates whether an independently-

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modifiable copy of the first workspace element has been modified. A synchronization-start module, at the client site operates within the first firewall and initiates the general synchronization module and the synchronization agent when predetermined criteria have been satisfied. The system further includes means for generating a preferred version from the first workspace element and from the copy by comparing the first version information and the second version information, and means for storing the preferred version at the first store and at the second store.

The system further handles the case when both the workspace element and the copy have been modified independently since the last date and time of synchronization. Accordingly, a content-based synchronization module performs a responsive action such as determined a preferred version or storing both the first workspace element and the copy at both the first store and at the second store.

The present method includes the steps of generating first examination results by examining first version information, which indicates whether a first workspace element stored at a first store within a firewall has been modified; and generating second examination results by examining second version information which indicates whether an independently-modifiable copy of the first workspace element, the copy being stored at a second store outside the firewall, has been modified. The present method further includes the steps of initiating synchronization from within the firewall when predetermined criteria have been satisfied; generating a preferred version from the first workspace element and from the copy based on the first and second examination results; and storing the preferred version at the first store and at the second store.

The system and method advantageously use a trusted third party to enable the synchronization of workspace data among multiple sites. Accordingly, a client user who maintains a work site, a home site, an off-site and the global server site can synchronize the workspace data or portions thereof among all four sites. Further, the predetermined criteria (which controls when the synchronizationstart module initiates synchronization) may be set so that the general synchronization module synchronizes the workspace data upon user request, at predetermined times during the day such as while the user is commuting, or after a predetermined user action such as user log-off or user log-on. Because the system and method operate over the Internet, synchronization can occur over any distance. Since synchronization is initiated from within the firewall, the typical firewall, which prevents in-bound communications, does not act as an impediment to workspace data synchronization. Also, since the user's preferences may be previously set, the present system and method may operate unattended by the client user.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a block diagram illustrating a secure data-synchronizing network in accordance with the present invention;

FIG. 2 is a block diagram illustrating details of a FIG. 1 service server;

FIG. 3 is a block diagram illustrating details of the FIG. 1 desktop computer;

FIG. 4 is a block diagram illustrating details of the FIG. 3 base system;

FIG. 5 is a block diagram illustrating details of the FIG. 1 synchronization agent; and

FIG. 6 is a flowchart illustrating a method for synchronizing multiple copies of a workspace element in a secure network.

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DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

FIG. 1 is a block diagram illustrating a secure data-synchronizing network 100, comprising a first site such as a remote computer terminal 105 coupled via a communications channel 110 such as the Internet to a global server 120. The global server 120 is in turn coupled via a communications channel 125 such as the Internet to a second site such as a corporate Local Area Network (LAN) 135. The global server 120 is protected by a global firewall 115, and the corporate LAN 135 is protected by a corporate firewall 130.

The corporate LAN 135 includes a corporate signal bus 140 coupling the corporate firewall 130 to an e-mail server 145 having e-mail data 165, to a file server 150 having file data 170, to a calendar server 155 having calendar data 175 and to a desktop computer 160 having user data 180. It will be appreciated that the e-mail data 165, file data 170, calendar data 175 and user data 180 or portions thereof may be stored at different locations such as locally on the desktop computer 160. It will be further appreciated that the e-mail data 165, file data 170, calendar data 175 and user data 180 are exemplary and collectively referred to herein as "workspace data" 185. Those skilled in the art will recognize that "workspace data" may include other types of data such as application programs. It will be further appreciated that the e-mail data 165, file data 170, calendar data 175 and user data 180 may each be divided into workspace elements, wherein each workspace element is identified by particular version information 255 (described below with reference to FIG. 2). Accordingly, each e-mail, file, calendar, etc. may be referred to as "a workspace element in workspace data."

An independently modifiable copy of the workspace data 185, referred to herein as workspace data 123, is stored on the global server 120 for easy access by a user from the remote terminal 105. Being a copy, the workspace data 123 includes independently modifiable copies of each workspace element in workspace data 185 and an independently modifiable copy of version information 255 (FIG. 2), referred to herein as version information 124.

Network 100 further comprises synchronization means, which includes a base system 190 stored within the corporate LAN 135 and for example on the desktop computer 160 and further includes a synchronization agent 126 stored outside the corporate firewall 130 and preferably on the global server 120. The base system 190 and the synchronization agent 126 cooperate to synchronize the workspace data 185 with the workspace data 123. Generally, the base system 190 manages the workspace data 185 within the corporate LAN 135 and the synchronization agent 126 manages the workspace data 123 within the global server 120. As described in greater detail below with reference to FIG. 4, the base system 190 preferably initiates and controls data synchronization. Other components and functions of the global server 120 are described in the cross-referenced patent applications which are herein incorporated by reference.

The remote terminal 105 may include a smart telephone or a Personal Data Assistant (PDA) such as the PalmPilot system by the U.S. Robotics, Inc. Although not shown, the remote terminal 105 may include a second base system similar to the base system 190, which is described with greater detail with reference to FIG. 4. Accordingly, the second base system on the remote terminal 105 would cooperate with the synchronization agent 126 to synchronize the workspace data stored on the remote terminal 105 with the workspace data 123 stored on the global server 120. As

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with the corporate LAN, the second base system on the remote terminal 105 would preferably initiate and control data synchronization with the global server 120 for the same reasons discussed below. Workspace data on the remote terminal 105 would thus be synchronized with the workspace data 123 and with the workspace data 185.

FIG. 2 is a block diagram illustrating details of a service server 200, wherein each of the e-mail server 145, the file server 150, the calendar server 155 and the desktop computer 160 is an instance thereof. Service server 200 includes a Central Processing Unit (CPU) 205 such as a Motorola Power PC® microprocessor or an Intel Pentium® microprocessor. An input device 210 such as a keyboard and mouse and an output device 215 such as a Cathode Ray Tube (CRT) display are coupled via a signal bus 220 to CPU 205. A communications interface 225 (such as an Ethernet port), a data storage device 230 (such as read only memory or a magnetic disk), and Random-Access Memory (RAM) 235 are further coupled via signal bus 220 to the CPU 205.

An operating system 240 includes a program for controlling processing by the CPU 205, and is typically stored in the data storage device 230 and loaded into the RAM 235 for execution. A service engine 245 includes a program for performing a particular service such as maintaining an e-mail data base, a calendar data base, a bookmarks data base or another file data base, and may be also stored in the data storage device 230 and loaded into the RAM 235 for execution. To perform a service, the service engine 245 operates on service data 250 (e.g., the e-mail data 165, the file data 170, the calendar data 175 or the user data 180), which is typically stored in the data storage device 250. The service data 250 includes version information 255 indicating the date and time of the last modification. The service engine 245 operates to update the version information 255 whenever modifications are made. It will be appreciated that the portion of memory in the data storage device 250 which contains the service data 250 is referred to as the service "store."

FIG. 3 is a block diagram illustrating details of the desktop computer 160, which includes a CPU 305, an input device 310, an output device 315, a communications interface 325, a data storage device 330 and RAM 335, each coupled to a signal bus 320.

An operating system 340 includes a program for controlling processing by the CPU 305, and is typically stored in the data storage device 330 and loaded into the RAM 335 for execution. A desktop service engine 345 (i.e., a particular service engine 245, FIG. 2) includes a service program for managing user data 180 (i.e., particular service data 250, FIG. 2) which includes version information 350 (i.e., particular version information 255, FIG. 2). The desktop service engine 345 may be also stored in the data storage device 330 and loaded into the RAM 335 for execution. The user data 180 may be stored in the data storage device 330. As stated above with reference to FIG. 1, the base system 190 operates to synchronize the workspace data 185 (which includes user data 180) with the workspace data 123. The base system 190 may be also stored in the data storage device 330 and loaded into the RAM 335 for execution.

FIG. 4 is a block diagram illustrating details of the base system 190, which includes a communications module 405, a user interface module 410, a locator module 415, a synchronization-start ("synch-start") module 420, a general synchronization module 425 and a content-based synchronization module 430. For simplicity, each module is illustrated as communicating with one another via a signal bus 440.

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The communications module 405 includes routines for compressing data, and routines for communicating via the communications interface 325 (FIG. 3) with the synchronization agent 126 (FIG. 1). The communications module 405 may further include routines for applying Secure Socket Layer (SSL) technology and user identification and authentication techniques (i.e., digital certificates) to establish a secure communication channel through the corporate firewall 130 and through the global firewall 126. Examples of communications modules 405 may include TCP/IP stacks or the AppleTalk® protocol.

The user interface 410 includes routines for communicating with a user, and may include a conventional Graphical User Interface (GUI). The user interface 410 operates in coordination with the other desktop computer 160 components as described herein.

The locator module 415 includes routines for identifying the memory locations of the workspace elements in the workspace data 185 and the memory locations of the workspace elements in the workspace data 123. Workspace element memory location identification may be implemented using intelligent software, i.e., preset memory addresses or the system's registry, or using dialogue boxes to query a user. Accordingly, the locator module 415 determines the memory addresses of the workspace elements in the e-mail data 165, the workspace elements in the file data 170, the workspace elements in the calendar data 175 and the workspace elements in the user data 180 as well as the memory addresses of the corresponding workspace elements in the workspace data 123. It will be appreciated that the locator module 415 may perform workspace element memory location identification upon system boot-up or after each communication with the global server 120 to maintain updated memory locations of workspace elements.

The synchronization-start module 420 includes routines for determining when to initiate synchronization of workspace data 123 and workspace data 185. For example, the synchronization-start module 420 may initiate data synchronization upon user request, at a particular time of day, after a predetermined time period passes, after a predetermined number of changes, after a user action such as user log-off or upon like criteria. The synchronization-start module 420 initiates data synchronization by instructing the general synchronization module 425 to begin execution of its routines. It will be appreciated that communications with synchronization agent 126 preferably initiate from within the corporate LAN 135, because the typical corporate firewall 130 prevents in-bound communications and allows out-bound communications.

The general synchronization module 425 includes routines for requesting version information 124 from the synchronization agent 126 (FIG. 1) and routines for comparing the version information 255 against a last synchronization signature 435 such as a last synchronization date and time to determine which versions have been modified. The general synchronization module 425 further includes routines for comparing the version information 124 and the version information 255 to determine if only one or both versions of a particular workspace element have been modified and routines for performing an appropriate synchronizing responsive action. Appropriate synchronizing responsive actions may include forwarding the modified version (as the preferred version) of a workspace element in workspace data 185 or forwarding just a compilation of the changes to the other store(s). Other appropriate synchronizing responsive actions may include, if reconciliation between two modified versions is needed, then instructing the content-based syn-

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chronization module 430 to execute its routines which are described below.

It will be appreciated that the synchronization agent 126 preferably examines the version information 124 and forwards only the version information 124 determined to be modified since the last synchronization signature 435. This technique makes efficient use of processor power and avoids transferring unnecessary data across the communications channel 125. The general synchronization module 425 in the corporate LAN 135 accordingly compares the received version information 124 with the version information 255 to determine if reconciliation is needed. Upon completion of the data synchronization, the general synchronization module 425 updates the last synchronization signature 435.

The content-based synchronization module 430 includes routines for reconciling two or more modified versions in workspace data 123, 185 of the same workspace element. For example, if the original and the copy of a user workspace element have both been modified independently since the last synchronization, the content-based synchronization module 430 determines the appropriate responsive action. The content-based synchronization module 430 may request a user to select the preferred one of the modified versions or may respond based on preset preferences, i.e., by storing both versions in both stores or by integrating the changes into a single preferred version which replaces each modified version at both stores.

FIG. 5 is a block diagram illustrating details of the synchronization agent 126, which includes a communications module 505 (similar to the communications module 405 described above with reference to FIG. 4) and a general synchronization module 510 (similar to the general synchronization module 425 described above also with reference to FIG. 4). The communications module 505 includes routines for compressing data, and routines for communicating via the communications channel 125 with the base system 190. The communications module 505 may further include routines for establishing a secure communications channel through the global firewall 126 and through the corporate firewall 130.

The general synchronization module 510 includes routines for comparing the version information 124 with the last synchronization signature 435, and routines for forwarding to the general synchronization module 425 version information 124 determined to be modified. The general synchronization module 510 may either maintain its own last synchronization signature 435 copy (not shown). Alternatively, the request to synchronize from the base system 190 may include a copy of the last synchronization signature 435. The general synchronization module 510 further includes routines for receiving preferred versions of workspace data 185 workspace elements from the general synchronization module 425, and routines for forwarding preferred versions of workspace data 123 workspace elements to the general synchronization module 425.

FIG. 6 is a flowchart illustrating a method 600 for synchronizing multiple copies of workspace data 123, 185 in a secure network 100. Method 600 begins with locator module 415 in step 605 identifying the memory locations of the workspace elements in workspace data 123, 185. As stated above, workspace element memory location identification may be implemented using intelligent software or dialogue boxes. The user interface module 410 in step 610 enables selection of the workspace elements in workspace data 123, 185 to be synchronized by the general synchronization module 425.

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The synchronization-start module 420 in step 615 determines whether predetermined criteria have been met which indicate that synchronization of the workspace elements selected in step 610 should start. If not, then method 600 loops back to step 615. Otherwise, the communications module 405 and communications module 505 in step 617 establish a secure communications channel between the global server 120 and the desktop computer 160. The general synchronization module 510 in step 620 compares the version information 124 of each of the selected workspace elements in workspace data 123 against the last synchronization signature 435 to determine modified workspace elements, and forwards the version information 124 of workspace elements determined to be modified to the general synchronization module 425. Further, the general synchronization module 425 in step 620 compares the version information 255 of each selected workspace element in the workspace data 185 against the last synchronization signature 435 to locate modified workspace elements. In this embodiment, a workspace element has been modified if the date and time of last modification is after the date and time of last synchronization.

If no modified workspace elements in workspace data 123 or in workspace data 185 are located, then the general synchronization modules 425 and 510 in step 650 update the last synchronization signature 435 and method 600 ends. Otherwise, the general synchronization module 425 in step 625 determines whether more than one version of the same workspace element has been modified since the last synchronization.

If only one version has been modified, then the corresponding general synchronization module 425 or 510 in step 630 forwards the updated preferred version of the workspace element to the other store, and then in step 635 determines whether all workspace elements selected in step 610 have been examined. If so, then method 600 jumps to step 650. Otherwise, then method 600 returns to step 620.

If more than one version has been modified, then the general synchronization module 425 in step 640 instructs the content-based synchronization module 430 to reconcile the modified versions. Reconciliation may include requesting instructions from the user or, based on preselected preferences, performing responsive actions such as storing both versions at both stores.

General synchronization module 425, 510 in step 645 sends the preferred version of the workspace element or just a compilation of the changes to the other store. That is, if the preferred version is a workspace element in the workspace data 185, then general synchronization module 425 sends the preferred version or the changes to general synchronization module 510 to update the outdated workspace element in the workspace data 123. If the preferred version is a workspace element in the workspace data 123, then the general synchronization module 510 sends the preferred version or the changes to the general synchronization module 425 to update the outdated workspace element in the workspace data 185. Method 600 then jumps to step 635.

The foregoing description of the preferred embodiments of the invention is by way of example only, and other variations of the above-described embodiments and methods are provided by the present invention. For example, although the global server 120 is illustrated as a single device, the global server 120 may include several computers networked together. Although not described in great detail, the remote terminal 105 can synchronize copies of workspace elements stored on it with workspace elements of

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workspace data 123 stored on the global server 120. Components of this invention may be implemented using a programmed general purpose digital computer, using application specific integrated circuits, or using a network of interconnected conventional components and circuits. The embodiments described herein have been presented for purposes of illustration and are not intended to be exhaustive or limiting. Many variations and modifications are possible in light of the foregoing teaching. The system is limited only by the following claims.

What is claimed is:

1. A computer-based method comprising the steps of:

- (a) generating first examination results from first version information which indicates whether a first workspace element stored at a first store within a firewall has been modified;
- (b) generating second examination results from second version information which indicates whether an independently-modifiable copy of the first workspace element has been modified, the copy being stored at a second store outside the firewall;
- (c) initiating steps (a) and (b) from within the firewall when predetermined criteria have been satisfied;
- (d) generating a preferred version from the first workspace element and from the copy based on the first and second examination results; and
- (e) storing the preferred version at the first store and at the second store.

2. The method of claim 1 wherein the second store is on a global server outside the firewall and which is protected by a global firewall.

3. The method of claim 1 wherein the first version information includes the date and time the first workspace element was last modified and the second version information includes the date and time the copy was last modified.

4. The method of claim 3 wherein generating the first examination results includes the step of comparing the first version information against a date and time of last synchronization.

5. The method of claim 3 wherein generating the second examination results includes the step of comparing the second version information against a date and time of last synchronization.

6. The method of claim 1 further comprising, before generating the first examination results, the step of updating the first version information whenever the first workspace element is modified.

7. The method of claim 1 further comprising, before generating the second examination results, the step of updating the second version information whenever the copy is modified.

8. The method of claim 1 wherein if only one of the first workspace element and the copy has been modified, then the step of generating includes selecting the one as the preferred version.

9. The method of claim 1 further comprising the step of locating the first workspace element, the first version information, the copy and the second version information.

10. A system comprising:

a general synchronization module for operating within a first firewall and for examining first version information to determine whether a first workspace element has been modified;

a synchronization agent for operating outside the first firewall and for forwarding to the general synchronization module second version information which indi-

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ates whether an independently modifiable copy of the first workspace element has been modified;

a synchronization-start module for operating within the first firewall and for initiating the general synchronization module and the synchronization agent when predetermined criteria have been satisfied;

means for generating a preferred version from the first workspace element and from the copy by comparing the first version information and the second version information; and

means for storing the preferred version at the first store and at the second store.

11. The system of claim 10 further comprising a communications module for communicating through the first firewall.

12. The system of claim 10 wherein the synchronization agent and the second store are on a global server which is protected by a global firewall.

13. The system of claim 12 further comprising a communications module for communicating through the first firewall and through the global firewall.

14. The system of claim 10 wherein the first version information includes the date and time the first workspace element was last modified and the second version information includes the date and time the copy was last modified.

15. The system of claim 14 wherein the general synchronization module compares the first version information against a date and time of last synchronization.

16. The system of claim 14 wherein the synchronization agent compares the second version information against the date and time of last synchronization.

17. The system of claim 10 further comprising means for updating the first version information whenever the first workspace element is modified.

18. The system of claim 10 further comprising means for updating the second version information whenever the copy is modified.

19. The system of claim 10 wherein if only one of the first workspace element and the copy has been modified, then the means for generating selects the one as the preferred version.

20. The system of claim 10 further comprising a locator module for locating the first store, the first workspace element, the first version information, the second store, the copy and the second version information.

21. A system comprising:

first means for generating first examination results from first version information which indicates whether a first workspace element stored at a first store within a firewall has been modified;

second means for generating second examination results from second version information which indicates whether an independently-modifiable copy of the first workspace element has been modified, the copy being stored at a second store outside the firewall;

means for initiating the first and second means from within the firewall when predetermined criteria have been satisfied;

means for generating a preferred version from the first workspace element and from the copy based on the first and second examination results; and

means for storing the preferred version at the first store and at the second store.

22. A computer-readable storage medium storing program code for causing a computer to perform the steps of:

(a) generating first examination results from first version information which indicates whether a first workspace element stored at a first store within a firewall has been modified;

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(b) generating second examination results from second version information which indicates whether an independently-modifiable copy of the first workspace element has been modified, the copy being stored at a second store outside the firewall;

(c) initiating steps (a) and (b) from within the firewall when predetermined criteria have been satisfied;

(d) generating a preferred version from the first workspace element and from the copy based on the first and second examination results; and

(e) storing the preferred version at the first store and at the second store.

23. A computer-based method comprising the steps of:

(a) generating first examination results from first version information which indicates whether a first workspace element stored at a first store within a firewall has been modified;

(b) generating second examination results from second version information which indicates whether an independently-modifiable copy of the first workspace element has been modified, the copy being stored at a second store outside the firewall;

(c) initiating steps (a) and (b) from within the firewall when predetermined criteria have been satisfied;

(d) determining based on the first and second examination results that both the first workspace element and the copy have been modified; and

(e) storing both the first workspace element and the copy at the first store and at the second store.

24. A system comprising:

first means for generating first examination results from first version information which indicates whether a first workspace element stored at a first store within a firewall has been modified;

second means for generating second examination results from second version information which indicates whether an independently-modifiable copy of the first workspace element has been modified, the copy being stored at a second store outside the firewall;

means for initiating the first and second means from within the firewall when predetermined criteria have been satisfied;

means for determining based on the first and second examination results that both the first workspace element and the copy have been modified; and

means for storing both the first file and the copy at the first store and at the second store.

25. A system comprising:

a global server for operating outside a firewall and including memory for storing first workspace data and corresponding first version information; and

a synchronization agent for managing the first workspace data and the corresponding first version information and for communicating with remote clients; and

a remote client for operating within the firewall and including memory for storing second workspace data and corresponding second version information;

means for cooperating with the synchronization agent to synchronize the first workspace data with the second workspace data by examining the first version information and the second version information; and

a synchronization-start module for initiating workspace data synchronization between the global server and the remote client.

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CLASS 707	SUBCLASS 10	O.I.P.E. SCANNED _____ Q.A. _____	ART UNIT 2171	EXAMINER
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TITLE OF INVENTION (FOR DESIGN APPLICATION ONLY):

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ISSUING CLASSIFICATION					
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EXAMINATION FIELD SEARCH

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** CONTINUING DATA ***** This application is a REX of 08/835,997 04/11/1997 PAT 6,085,192				
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PATENT APPLICATION



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CONTENTS

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1. REQUEST PAPERS FILED

2. *Title Report**6-24-2004*3. *Notice of Beexam Request Filing Date 6-24-2004*4. *Notice of Assign of Beexam Request 6-24-2004*

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